

# **ELECTRICAL CONSTRUCTION AND MAINTENANCE**

WITH ELECTRICAL CONTRACTING

A MCGRAW-HILL PUBLICATION

# **e**lectrical **p**roducts **g**uide

**Apparatus and Supplies**

**Technical Application Data**

**Components**

**Tools and Accessories**

**MID-SEPTEMBER 1955**

<b>ARIZONA</b> Phoenix Alpine 4-9276  <b>ARKANSAS</b> Little Rock 2-5154	<b>INDIANA</b> Evansville 5-7276 Ft. Wayne Anthony 3421 Hammond Russel 9400 Indianapolis Melrose 2-3301 Muncie 3-6335	<b>MICHIGAN</b> Detroit Tyler 8-9000 Flint Cedar 4-8623 Grand Rapids 9-4664 Lansing 4-8461	<b>NORTH CAROLINA</b> Charlotte 5-3715 Greensboro 3-8661 Raleigh 3-4841	<b>SOUTH CAROLINA</b> Columbia 6-4941 Greenville 3-6201  <b>TENNESSEE</b> Memphis 37-9431 Knoxville 4-8644
<b>CALIFORNIA</b> Fresno 4-5091 Long Beach 35-4861 Los Angeles Madison 9-4161 Oakland Templebar 4-9900 Sacramento Gilbert 3-6525 San Francisco Underhill 1-5051 San Jose Cypress 7-5929	<b>ILLINOIS</b> Chicago Taylor 9-5000 Danville 1901 Peoria 2-5456 Rockford 5-0577  <b>IOWA</b> Davenport 3-9966 Des Moines 62-3181 Sioux City 5-7634 Waterloo Adams 4-4679	<b>MINNESOTA</b> Duluth Melrose 2-2625 Minneapolis Lincoln 7001 St. Paul Capitol 4-7441  <b>MISSISSIPPI</b> Jackson 2-8354  <b>MISSOURI</b> St. Louis Central 4838  <b>MONTANA</b> Billings 9-2813 Butte 2-2374	<b>NORTH DAKOTA</b> Fargo 2-4446  <b>OHIO</b> Cincinnati Capitol 1300 Cleveland Tower 1-5660 Columbus Main 5571 Dayton Michigan 0331 Toledo Adams 6184	<b>TEXAS</b> Amarillo 2-6536 Beaumont 4-6333 Corpus Christi 2-3351 Dallas Randolph 2401 Fort Worth FO 5611 Houston Capitol 7272 Lubbock 3-0425 San Antonio Garfield 9271
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<b>DISTRICT OF COLUMBIA</b> Washington National 8-9700	<b>LOUISIANA</b> Baton Rouge 3-0490 New Orleans Tulane 5411 Shreveport 3-0583	<b>NEW JERSEY</b> Newark Mitchell 2-3450 Trenton Owen 5-5421  <b>NEW MEXICO</b> Albuquerque 3-3708	<b>PENNSYLVANIA</b> Allentown Hemlock 4-5105 Erie 4-8191 Johnstown 8-1293 Philadelphia Walnut 2-8950	<b>VIRGINIA</b> Norfolk 5-0525 Richmond 3-0111 Roanoke 4-3271
<b>FLORIDA</b> Jacksonville 3-7431 Miami 65-3271 Tampa 2-4271	<b>MAINE</b> Augusta 2040 Bangor 6487	<b>NEW YORK</b> Albany 8-7801 Hempstead Olympia 8-5220 Johnson City 9-1561 Long Island City Stillwell 6-7700 Newburgh 5420 Rochester Genesee 8880	<b>PITTSBURGH</b> Allegheny 1-5500 Reading 6-7236 Williamsport 2-6184 York 5556	<b>WASHINGTON</b> Seattle Elliot 7001 Spokane Empire 3371 Tacoma Bdway 8417 Yakima 3-4701
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H.P.	F. L. R.P.M.	NEMA No.	F. L. % Eff.	F. L. % P. F.	Torque Lbs. Ft.			Net Wt.
					F. L.	Break Down	Locked	
1/8	1140	48	48.5	57.0	0.57	1.60	2.35	21
1/8	1725	48	61.7	63.1	0.51	1.40	1.55	18
1/6	1140	48	44.5	57.3	0.77	2.10	3.75	24
1/6	1725	48	60.0	65.0	0.77	2.00	2.46	21
1/4	1140	56	52.5	62.0	1.15	2.58	3.30	32
1/4	1725	48	64.5	67.0	1.00	2.56	3.45	24
1/2	1725	56	67.3	68.0	1.00	2.50	3.75	32
1/2	1140	56	56.2	60.5	1.53	3.72	4.90	36
1/2	3450	56	73.7	76.0	0.77	1.62	1.85	32
1/2	1725	56	69.5	68.6	1.53	3.82	4.13	36
1/2	1140	56	62.6	64.7	2.29	5.45	6.10	39
3/4	3450	56	74.0	84.0	1.15	2.74	3.12	36
3/4	1725	56	73.6	73.0	2.29	4.88	7.80	39
3/4	1140	184	71.5	68.0	3.44	7.10	9.80	67
1	3450	56	74.6	83.6	1.53	2.38	3.50	39
1	1725	182	79.8	75.0	3.05	6.70	6.40	49
1.5	3450	182	77.2	85.0	2.29	5.60	4.90	49
1.5	1725	184	78.0	74.0	4.57	10.00	11.00	67
2	3450	184	77.0	90.0	3.06	6.90	5.90	67

Squirrel Cage Induction Motors, Normal Torque, NEMA Design B,  
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H.P.	F. L. R.P.M.	NEMA No.	F. L. % Eff.	F. L. % P. F.	Torque Lbs. Ft.			Net Wt.
					F. L.	Break Down	Locked	
1/8	3450	48						18
1/8	1725	48						18
1/4	1140	56	69.0	67.3	1.14	3.95	3.34	25
1/4	850	56						29
1/2	3450	48						18
1/2	1725	48			1.02			21
1/2	1725	56	78.2	72.1	1.02	3.54	2.59	25
1/2	1140	56	71.8	65.0	1.52	5.37	4.56	25
1/2	850	56						34
1/2	3450	48						21
1/2	1725	48						24
1/2	1725	56	73.6	73.8	1.51	5.13	4.23	26
1/2	1140	56	72.0	75.5	2.33	6.43	4.75	29
1/2	850	182						42
3/4	3450	56	79.6	83.8	1.13	3.48	3.32	26
3/4	1725	56	80.5	79.8	2.29	7.3	5.8	29
3/4	1140	182	82.0	69.0	3.42	11.0	7.9	42
3/4	850	184						46
1	3450	56	83.0	90.0	1.53	5.30	4.14	29
1	1725	56	82.4	85.7	3.05	9.15	7.63	34
1	1725	182	84.0	85.0	3.05	10.07	8.56	43
1	1140	184	83.5	70.8	4.56	14.4	9.15	46
1	850	213						98
1.5	3450	182	83.5	97.6	2.28	7.42	5.82	43
1.5	1725	184	87.6	84.0	4.56	14.90	11.20	46
1.5	1140	184	83.6	76.5	6.86	18.90	14.70	51
1.5	850	213						98
2	3450	184	86.0	94.8	3.05	8.40	7.33	46
2	1725	184	88.4	88.6	6.10	17.10	14.60	51
2	1140	213	82.5	79.0	9.12	26.90	18.24	98
2	850	215						110
3	3450	184						51
3	1725	184						60
3	1725	213	85.4	90.5	9.15	24.50	16.30	98
3	1140	215	83.1	84.1	13.70	36.55	25.20	110
5	3450	213						98
5	1725	215	89.0	89.9	15.15	39.80	28.30	110
7.5	3450	215						118

\*Performance characteristics are for 60 cycle motors.

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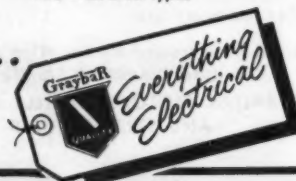
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MID-SEPTEMBER • 1955

VOL. 54 No. 9A

# ELECTRICAL CONSTRUCTION AND MAINTENANCE

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## ELECTRICAL PRODUCTS GUIDE ISSUE

<b>Technical Data Reference Section . . . . .</b>	<b>Page 5</b>
Electrical Symbols, Calculations and Tables; Lighting Data	
<b>Company and Trade Name Directory . . . . .</b>	<b>Page 59</b>
Alphabetical listing of manufacturers' names, addresses and trade names	
<b>Manufacturers' Product Data Section . . . . .</b>	<b>Page 91</b>
Product information, presented by manufacturers	
<b>Product Directory . . . . .</b>	<b>Page 151</b>
Alphabetical, cross-referenced listing of electrical and allied products showing manufacturers of each product with complete addresses	

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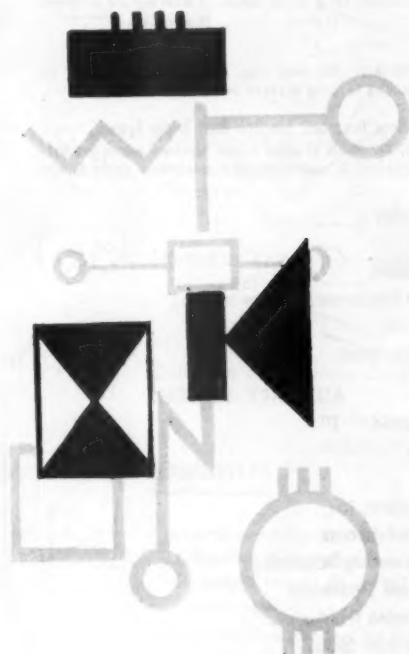
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# Technical Data Reference Section

A collection of technical data commonly used in electrical engineering and construction practice



## GRAPHICAL SYMBOLS

Page

Architectural .....	6
Power, Control and Signals .....	7
Communications and Electronics .....	17
Bus Duct .....	21

## ELECTRICAL TABLES AND CALCULATIONS

National Electrical Code Tables .....	22
Conversion Factors and Tables .....	26
Motor Selection Chart .....	29
Voltage Drop Tables .....	30
Practical Calculations .....	31

## LIGHTING DESIGN AND LAYOUT DATA

Design Formulas .....	36
System Classifications .....	37
Luminaire Mounting and Spacing .....	37
Room Ratio-Room Index Formulas and Conversion .....	38
Selection of Luminaires .....	38
Room Indexes .....	39
Coefficients of Utilization .....	40
Lamp Specifications .....	41
Load and Light Output .....	45
Equipment Design Data .....	46
Design Considerations .....	47
Recommended Footcandles, Reflectances and Brightness Ratios .....	48

## ELECTRIC SPACE HEATING DATA

Calculations .....	50
Heat Loss Coefficients .....	51
Degree Days and Design Temperatures .....	55
Recommended Wire Sizes and Circuit Lengths .....	56

## SOUND SYSTEM DESIGN DATA

Design Considerations .....	57
-----------------------------	----

# GRAPHICAL SYMBOLS FOR ARCHITECTURAL PLANS

## Ceiling Wall.

- —○ Outlet.
- ⊖ —⊖ Blanked Outlet.
- ⊙ —⊙ Drop Cord.
- ⊕ —⊕ Electrical Outlet; for use only when circle used alone might be confused with columns, plumbing symbols, etc.
- ⊖ —⊖ Fan Outlet.
- ⊙ —⊙ Junction Box.
- ⊙ —⊙ Lampholder.
- ⊙ —⊙<sub>PS</sub> Lampholder with Pull Switch.
- ⊙ —⊙ Pull Switch.
- ⊙ —⊙ Outlets for Vapor Discharge Lamp.
- ⊙ —⊙ Exit Light Outlet.
- ⊙ —⊙ Clock Outlet. (Specify Voltage)

## GENERAL OUTLETS

- ⊕ Duplex Convenience Outlet.
- ⊕<sub>3</sub> Convenience Outlet other than Duplex.  
1 = Single, 3 = Triplex, etc.
- ⊕<sub>WP</sub> Weatherproof Convenience Outlet.
- ⊕<sub>R</sub> Range Outlet.
- ⊕<sub>S</sub> Switch and Convenience Outlet.
- ⊕<sub>R</sub> Radio and Convenience Outlet.
- ⊕<sub>SP</sub> Special Purpose Outlet. (Des. in Spec.)
- ⊕<sub>F</sub> Floor Outlet.

## CONVENIENCE OUTLETS

- S Single Pole Switch.
- S<sub>2</sub> Double Pole Switch.
- S<sub>3</sub> Three Way Switch.
- S<sub>4</sub> Four Way Switch.
- S<sub>D</sub> Automatic Door Switch.
- S<sub>E</sub> Electrolier Switch.
- S<sub>K</sub> Key Operated Switch.
- S<sub>P</sub> Switch and Pilot Lamp.
- S<sub>CB</sub> Circuit Breaker.
- S<sub>WCB</sub> Weatherproof Circuit Breaker.
- S<sub>MC</sub> Momentary Contact Switch.
- S<sub>RC</sub> Remote Control Switch.
- S<sub>WP</sub> Weatherproof Switch.
- S<sub>F</sub> Fused Switch.
- S<sub>WFF</sub> Weatherproof Fused Switch.

## SWITCH OUTLETS

- <sub>a,b,c,etc</sub> Any Standard Symbol as given above with the addition of a lower case subscript letter may be used to designate some special variation of Standard Equipment of particular interest in a specific set of Architectural Plans.
- ⊕<sub>a,b,c,etc</sub>
- ⊕<sub>a,b,c,etc</sub>

When used they must be listed in the Key of Symbols on each drawing and if necessary further described in the specifications.

## SPECIAL OUTLETS

## PANELS, CIRCUITS, AND MISCELLANEOUS

- ⊕ Lighting Panel.
  - ⊕ Power Panel.
  - Branch Circuit; Concealed in Ceiling or Wall.
  - Branch Circuit; Concealed in Floor.
  - Branch Circuit; Exposed.
  - Home Run to Panelboard. Indicate number of Circuits by number of arrows.
- Note: Any circuit without further designation indicates a two-wire circuit. For a greater number of wires indicate as follows:  
(3 wires) (4 wires), etc.

- Feeders. Note: Use heavy lines and designate by number corresponding to listing in Feeder Schedule.

- ⊕ Underfloor Duct and Junction Box. Triple System.  
Note: For double or single systems eliminate one or two lines. This symbol is equally adaptable to auxiliary system layouts.

- ⊕ Generator.
- ⊕ Motor.
- ⊕ Instrument.
- ⊕ Power Transformer. (Or draw to scale.)
- ⊕ Controller.
- ⊕ Isolating Switch.

## AUXILIARY SYSTEMS

- ⊕ Pushbutton.
- ⊕ Buzzer.
- ⊕ Bell.
- ⊕ Annunciator.
- ⊕ Outside Telephone.
- ⊕ Interconnecting Telephone.
- ⊕ Telephone Switchboard.
- ⊕ Bell Ringing Transformer.
- ⊕ Electric Door Opener.
- ⊕ Fire Alarm Bell.
- ⊕ Fire Alarm Station.
- ⊕ City Fire Alarm Station.
- ⊕ Fire Alarm Central Station.
- ⊕ Automatic Fire Alarm Device.
- ⊕ Watchman's Station.
- ⊕ Watchman's Central Station.
- ⊕ Horn.
- ⊕ Nurse's Signal Plug.
- ⊕ Maid's Signal Plug.
- ⊕ Radio Outlet.
- ⊕ Signal Central Station.
- ⊕ Interconnection Box.
- ⊕ Battery.

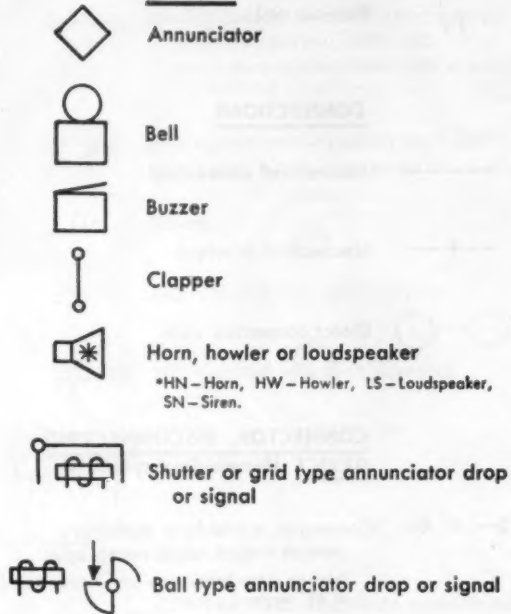
## Auxiliary System Circuits.

Note: Any line without further designation indicates a 2-Wire System. For a greater number of wires designate with numerals in manner similar to ---12-W. 18W-1/4" C., or designate by number corresponding to listing in Schedule.

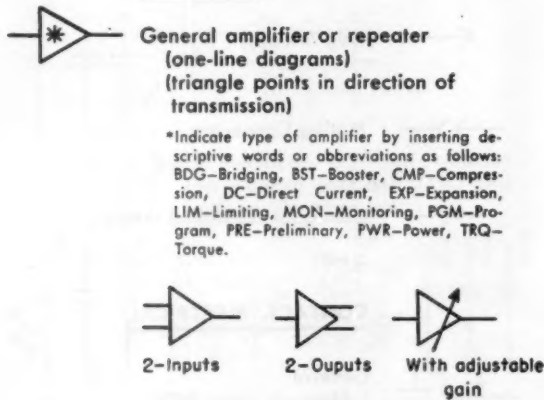
- ⊕<sub>a,b,c</sub> Special Auxiliary Outlets.

Subscript letters refer to notes on plans or detailed description in specifications.

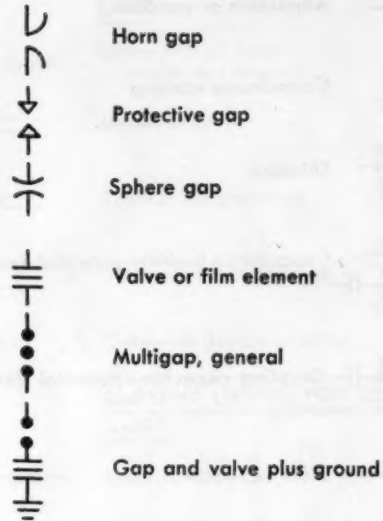
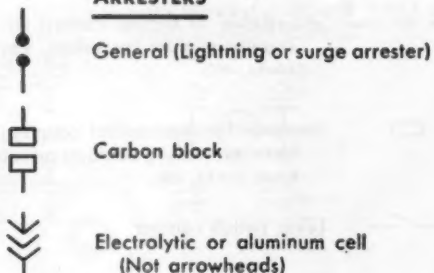
## ALARMS



## AMPLIFIERS



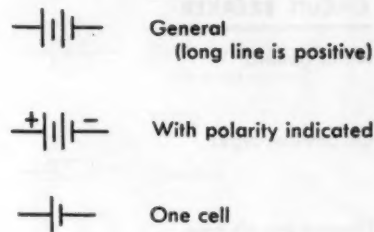
## ARRESTERS



## ATTENUATOR



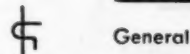
## BATTERY



## BIMETAL ELEMENT



## BUSHING




## CAPACITOR

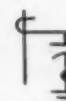



Note: The curved element shall represent: the outside electrode in fixed paper-dielectric and ceramic-dielectric capacitors; the negative electrode in electrolytic capacitors; and the moving element in variable and adjustable capacitors.

 Adjustable or variable

 Capacitance bushing


 Shielded

 Capacitance bushing-potential device

 Coupling capacitor-potential device

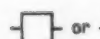
 Shunt capacitor

 Series terminating capacitor, path open

 Series terminating capacitor, path shorted

### CIRCUIT BREAKER

 Air or general


 Oil or other types

 Thermal trip air type

 Removable element


 Motor operated

### CIRCUIT ELEMENT

 General

\*Indicate type of equipment by descriptive words or abbreviations:  
CB—Circuit Breaker, DIAL—Telephone Dial,  
EQ—Equalizer, FAX—Facsimile Set, FL—Filter,  
FL-BP—Filter (band pass), NET—Network,  
PS—Power Supply, TEL—Telephone station.

### COILS

 Operating coil

\*Insert identifying letter in the circle.

 Blowout coil



### CONNECTIONS

 Mechanical connection

 Mechanical interlock

 Direct connected units

### CONNECTOR, DISCONNECTING DEVICE (Single-line symbols)

 or  Connector, movable or stationary portion — jack, plug, receptacle. (Not an arrowhead; lines are longer and at 45° angles.)



 Jack (usually)



 Plug (usually)



 Mating Connectors


 Connector normalled through

### CONTACT, ELECTRICAL

 or  General:  
Normally open (NO)


 or  Normally closed (NC)


 or  Adjustable or sliding contact or regular contact for relays, keys, jacks, etc.

 Insulator for mechanical coupling between moving contacts on relays, keys, jacks, etc.

 Lever switch contact



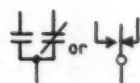
 Moving contact or armature for relays, non-locking keys, jacks, etc.  
(Use circle to represent pivot point on moving contacts.)


 Moving contact for locking keys, jacks, etc.  
(Use circle to indicate pivot point.)

 Sleeve

 TC NO Contact with time closing

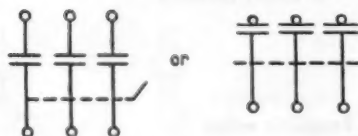
 TO NC Contact with time opening

 Transfer

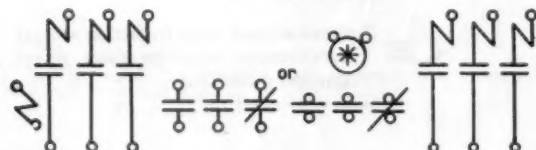
 Make before break


### CONTACTORS (Symbols assembled from basic symbols)

3-pole manually operated contactor without blowout coils

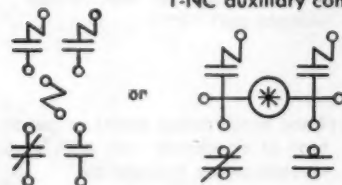


3-pole electrically operated contactor with blowout coils and 2-NO and 1-NC auxiliary contacts



 Single pole electrically operated contactor without blowout coil, with operating coil and series holding coil 1-NC auxiliary contact.


2-pole electrically operated contactor with blowout coils and 1-NO and 1-NC auxiliary contacts.





### CORE

No Symbol General or air core  
(Notate when necessary)

 Magnetic core

 Relay or magnet core

 or  Core with single winding

 or  Core with double winding

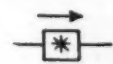
### CURRENT LIMITER FOR POWER CABLE

 General

### DIRECTION OF POWER, SIGNAL FLOW

 One way

 Both ways


 One way circuit element —  
\*Indicate element

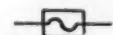
### FUSE

 General


 Drawout carriage mounting

 Fusible element

 High voltage primary fuse cutout, dry, or fuse disconnecting switch

 High voltage primary fuse cutout, oil

### GENERAL SYMBOL



 Any piece of equipment —  
\*Indicate type of apparatus — to be used where internal details need not be shown.

### GROUND

 General

### INDUCTOR


 or  General

 or  Magnetic core


 Tapped

 Adjustable

 Variable

 Shunt

### LAMP

 General —  
\*Use letter or abbrev. to indicate color

 Illuminating

### MACHINE, ROTATING

 Basic

 or  Field, generator or motor

 Generator, general

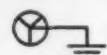
 Motor, general


Windings —


 1-phase


 2-phase

 3-phase wye (ungrounded)

 3-phase wye (grounded)

 3-phase delta

 6-phase diametrical

 6-phase double delta

One  
Line

Complete





3-wire squirrel cage induction motor  
or generator—3-phase or 2-phase





2-phase — 4-wire or single-phase split  
phase induction motor or generator  
or rotary converter





Repulsion motor





3-phase wound rotor induction motor,  
synchronous induction motor, or in-  
duction generator





3-phase synchronous motor or gen-  
erator or condenser





3-phase synchronous motor or gener-  
ator or condenser with neutral  
brought out





3-phase synchronous motor or gener-  
ator or condenser with both ends  
of each phase brought out



2-phase - 4-wire synchronous motor or generator



1-phase repulsion start induction motor



1-phase synchronous generator



1-phase hysteresis motor



3-phase synchronous or regulating pole converter



3-phase reluctance motor

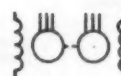
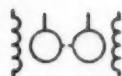


3-phase double winding synchronous generator, motor or condenser



Magneto-electric generator

1-phase 3-phase



3-phase synchronous - synchronous frequency changer



Rotating armature with commutator and brushes  
(Broken line indicates where line connection is made in diagram.)



3-phase motor converter



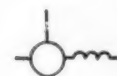
Separately excited ac generator or motor



Separately excited dc generator or motor with commutating and/or compensating field winding



3-phase synchronous - induction frequency changer



dc series motor or 2-wire generator



Phase shifter - 1-phase output



dc shunt motor or 2-wire generator



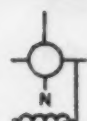
Phase shifter - 3-phase output



dc compound motor or 2-wire generator or stabilized shunt motor



1-phase shaded pole motor



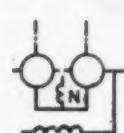
dc 3-wire shunt generator



dc 3-wire compound generator



dc balancer — shunt wound



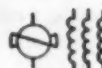
dc balancer — compound wound



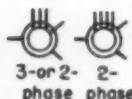
Dynamotor



Double current generator



Regulating exciter — shunt wound



Shunt characteristic brush-shifting motor  
3-or 2- phase phase



Series characteristic brush-shifting motor with 3-phase rotor  
3-or 2- phase phase



3-phase regulating machine

## METER OR INSTRUMENT



or



General —

(Indicate type of instrument by letters in circle or box)

A—Ammeter, AH—Ampere hour meter, CMC—Contact making clock, D—Demand meter, F—Frequency meter, GD—Ground detector, OHM—Ohmmeter, OSC—Oscillograph, PF—Power factor meter, S—Synchroscope, VAR—Varmeter, V—Voltmeter, WH—Watt hour meter, W—Wattmeter.



With terminals

## NETWORK



General



Low voltage power

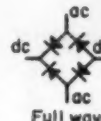


## POWER SUPPLY

## RECTIFIER



Half wave



Full wave

Dry Type —

(Arrow indicates direction of conventional current flow.)



Power rectifier

## RELAY



Basic



or



Over-current or overvoltage relay with 1-NO contact



TO

Overload relay with 2 current coils and 1-NC contact with time opening

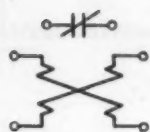


or

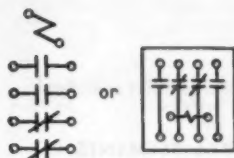


Thermal overload relay with 2 series heating elements and 1-NC contact

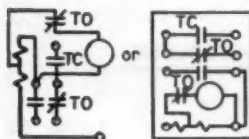




Open phase or phase reversal relay with 4 current coils and 1-NC contact



Multi-circuit relay with 2-NO and 2-NC contacts, operating coil



Motor driven timing relay



Relay for system protection against over-current, under-current and reverse-current

### RELAY FUNCTION SYMBOLS



Over (General)



Under (General)



Direction (General)—directional over



Balance (General)



Differential (General)



Pilot wire (General)



Carrier current (General)

### Operating quantity —

Indicate operating quantity by the following letters or symbols — either on or above the relay function symbols:

C—Current\*, Z—Distance, V—Voltage, W—Power, f—Frequency, φ—Phase, T—Temperature, GP—Gas pressure, S—Synchronism.

\*The letter may be omitted in the case of current.

### Examples:



— over-current



— under voltage



— power directional



— phase balance



— over frequency

### RESISTOR



or



General —

\*Use an identifying legend within or adjacent to this symbol



or



Tapped



or



Adjustable



or



Variable

### SHIELDING



General (short dashes)

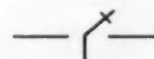


Enclosing

### SWITCH



General — air break switch, direct manually operated, single throw



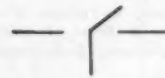
Air break switch, direct manually operated, double throw



Air break switch, remote operated, single throw



Make-before-break multi-circuit switch



Air break switch, remote operated, double throw



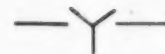
Limit switch



Air break switch, remote operated, single blade selector type



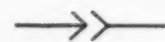
Snap and tumbler switches



Air break switch, remote operated, double blade selector type



General



Disconnecting device  
(Coupling or plug type contacts)



## THERMOCOUPLES

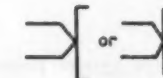
General



Selector switch

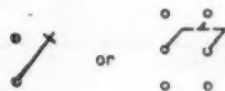


One line

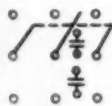


Complete

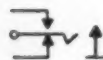
Thermoelement



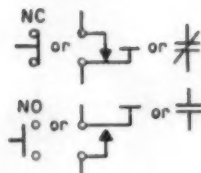
Knife switch



Knife switch with auxiliary contacts



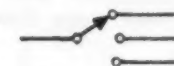
Two-position, locking transfer key switch



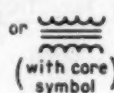
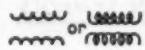
Pushbutton or sensitive type switch



Pushbutton open and closed (Spring return)

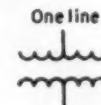


General-switch with multiple transmission paths



## TRANSFORMERS

General

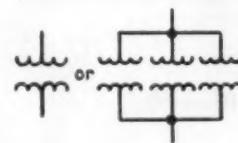


One line

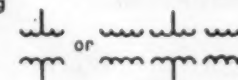


Complete

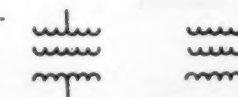
1-phase, 2-winding



3-phase bank of 1-phase, 2-winding transformers



Polyphase, 2-winding transformer



3-winding, 1-phase transformer



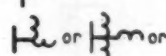
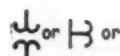
Transformer with taps — 1-phase



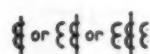
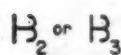
Constant current transformer — 1-phase



Autotransformer, 1-phase



Potential (Voltage) transformer



Current transformer



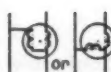
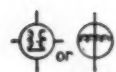
Bushing type current transformer



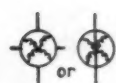
Outdoor metering outfit



Load ratio control transformer with taps



1-phase induction voltage regulator



3-phase induction voltage regulator



Winding connection symbols:—  
2-phase, 3-wire (ungrounded)



2-phase, 3-wire (grounded)



2-phase, 4-wire



2-phase, 5-wire (grounded)



3-phase, 3-wire delta or mesh.



3-phase, 4-wire delta (ungrounded)



3-phase, 4-wire delta (grounded)



3-phase wye or star (ungrounded)



3-phase wye (grounded neutral)



3-phase zig-zag (grounded)



3-phase Scott or "T"



6-phase double delta



6-phase hexagonal or chordal

	6-phase star or diametrical		Crossing of connected conductors
	6-phase star (grounded neutral)		Joining of conductors not crossing
	3-phase open delta		Cable termination
	3-phase, 4-wire (ungrounded)		Ground connection (Ground wire may be described by note.)
	One Line		Conduit or grouping of leads
	Complete (3 wires) WIRING		Duplex or quadded cable
	Electric conductors		Pair
	Conductors underground or in conduit		Coaxial cable
	Future conductors		Switchboard cable
	Spliced conductors or change of type or size		
	Incoming lines		
	Outgoing lines		
	Tie lines		
	Crossing of conductors not connected		



## ANTENNAE



General —

\*Indicate type by words or abbreviations



Aerial



Counterpoise

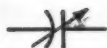


Loop

## CAPACITOR



Fixed



Variable or adjustable

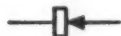


Shielded



Ganged, variable  
(with mechanical linkage)

## CRYSTAL



Detector



Piezo-electric

## DIAL



Typical

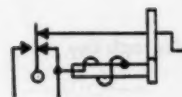
(Use springs and contacts as required.)

## GENERAL —

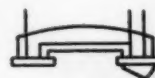


\*Indicate type of apparatus. Use where internal details need not be shown.

## GENERATOR



(Hand)



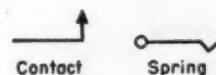
3-conductor



4-conductor

## HAND SET

## JACK



Contact

Spring

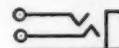
Components



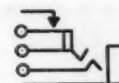
Sleeve



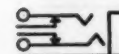
2-conductor jack



3-conductor jack



3-conductor jack  
(with auxiliary contacts)

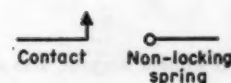


Series — 3-conductor jack



Gang

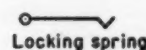
## KEY



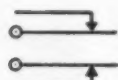
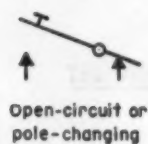
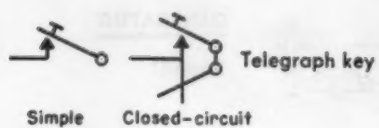
Contact

Non-locking spring

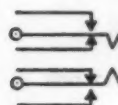
Components



Locking spring



Non-locking



Locking



**LAMP**

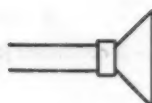
Switchboard



Illuminating



Ballast or resistance



**LOUDSPEAKER**

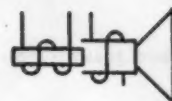
General



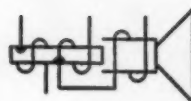
Magnetic armature



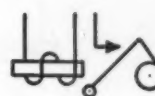
Permanent magnet, with moving coil



Electromagnetic, with moving coil



Electromagnetic, with moving coil and hum-neutralizing winding



**MESSAGE REGISTER**



**MICROPHONE**

General (Single button)



Double button



Condenser



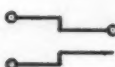
Moving coil



Velocity

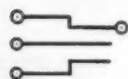


Crystal



**PLUG**

2-conductor switchboard plug



3-conductor switchboard plug



Gang



Non-polarized  
(Number of terminals as required)



Polarized



Radial prong  
Indicates polarization

3-conductor polarized

#### RECEIVER



General



Hand



Single head set



Double head set

#### RECEPTACLE



Non-polarized  
(Number of terminals as required)



Polarized



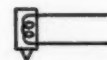
Radial contact  
Indicates polarization

3-conductor polarized

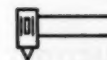
#### REPRODUCER (PICK-UP)



General

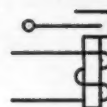


Electromagnetic



Crystal

#### SOUNDER-TELEGRAPH



General



Adaptation with contact

#### SWITCH



Selector type



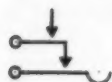
10-point selector



Wafer



Pentagrid converter



**SWITCH HOOK**

General



Phototube  
(vacuum or gas-filled)



**TRANSMITTER**

General



Gas-filled:—  
Glow-discharge diode with cold  
cathode



**TUBES (ELECTRON)**

High-vacuum:—  
Diode with filamentary cathode  
(kenotron)



Diode with filamentary cathode  
(phanotron)



Mercury-pool diode with ignitor  
(ignitron)



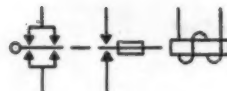
Triode with indirectly heated cathode  
(pliotron)



Triode with filamentary cathode  
(thyatron)



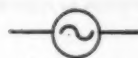
Screen grid with indirectly heated  
cathode



**VIBRATOR**



Pentode with directly heated cathode



**VOLTAGE SOURCE**

ac — General

# GRAPHICAL BUS DUCT SYMBOLS

Edgewise	Flatwise	Single-Line	Edgewise	Flatwise	Single-Line
	 Standard 10' Section (Plug-in)			 End Tap Switch Box	
	 Standard 10' Section (Feeder)			 Fusible Switch Adapter (Cubicle)	
	 Weatherproof Duct			 Circuit Breaker Adapter (Cubicle)	
	 Elbow			 Fusible Plug-in Branch Run Adapter	
	 Tee			 Plug-in Branch Run Adapter	
	 Cross			 Plug-in Cable Tap Box	
	 Flanged End Connection			 Bus Bar Extension	
	 Wall Flange			 Section Bus Bar Adapter	
	 Roof Flange			 Vaco-Break Plug	
	 Transformer Tap Opening			 'BP' Plug	
	 Ebony End			 Circuit Breaker Plug	
	 End Closer			 Circuit Master Plug	
	 Panelboard Adapter			 Ground Detector Plug (Potentializer)	
	 Transposition			 Temperature Indicating Plug	
	 Expansion Joint			 Capacitor Plug	
	 End Cable Tap Box			 Transformer Plug	
	 Center Cable Tap Box				



# CODE TABLES

**COMBINATION OF CONDUCTORS**  
Per Cent Area of Conduit or Tubing Occupied by Conductors

	Number of Conductors				
	1	2	3	4	Over 4
Conductors (not lead covered) . . .	53	31	43	40	40
Lead-covered conductors . . . . .	55	30	40	38	35
For rewiring existing raceways for increased load where it is impracticable to increase the size of the raceway due to structural conditions	60	40	50	50	50

**DIMENSIONS OF CONDUIT OR TUBING**

Size	Internal Diameter Inches	Area Square Inches	Size	Internal Diameter Inches	Area Square Inches
3/8	.622	.30	3	3.068	7.38
3/4	.824	.53	3 1/2	3.548	9.90
1	1.049	.86	4	4.026	12.72
1 1/4	1.380	1.50	4 1/2	4.506	15.95
1 1/2	1.610	2.04	5	5.047	20.00
2	2.067	3.36	6	6.065	28.89
2 1/2	2.469	4.79			

**ALLOWABLE CURRENT-CARRYING CAPACITIES OF INSULATED CONDUCTORS IN AMPERES**

Not More Than Three Conductors in Raceway or Cable

(Based on Room Temperature of 30 C. 86 F.)

Size AWG MCM	Rubber Type R Type RW Type RUW (14-2)	Rubber Type RH	Paper Thermoplastic Asbestos Type TA Var-Cam Type V Asbestos Var-Cam Type AVS	Asbestos Var-Cam Type AVA Type AVL	Impregnated Asbestos Type AI (14-8) Type AIA	Asbestos Type A (14-8) Type AA
14	15	15	25	30	30	30
12	20	20	30	35	40	40
10	30	30	40	45	50	55
8	40	45	50	60	65	70
6	55	65	70	80	85	95
4	70	85	90	105	115	120
3	80	100	105	120	130	145
2	95	115	120	135	145	165
1	110	130	140	160	170	190
0	125	150	155	190	200	225
00	145	175	185	215	230	250
000	165	200	210	245	265	285
0000	195	230	235	275	310	340
250	215	255	270	315	335	....
300	240	285	300	345	380	....
350	260	310	325	390	420	....
400	280	335	360	420	450	....
500	320	380	405	470	500	....
600	355	420	455	525	545	....
700	385	460	490	560	600	....
750	400	475	500	580	620	....
800	410	490	515	600	640	....
900	435	520	555	...	...	....
1000	455	545	585	680	730	....
1250	495	590	645	...	...	....
1500	520	625	700	785	...	....
1750	545	650	735	...	...	....
2000	560	665	775	840	...	....

**ALLOWABLE CURRENT-CARRYING CAPACITIES OF INSULATED CONDUCTORS IN AMPERES**

Single Conductor in Free Air

(Based on Room Temperature of 30 C. 86 F.)

Size AWG MCM	Rubber Type R Type RW Type RUW (14-2)	Rubber Type RH	Thermoplastic Asbestos Type TA Var-Cam Type V Asbestos Var-Cam Type AVS	Asbestos Var-Cam Type AVA Type AVL	Impregnated Asbestos Type AI (14-8) Type AIA	Asbestos Type A (14-8) Type AA	Slow Burning Type SB Weather-proof Type WP Type SBW
14	20	20	30	40	40	45	30
12	25	25	40	50	50	55	40
10	40	40	55	65	70	75	55
8	55	65	70	85	90	100	70
6	80	95	100	120	125	135	100
4	105	125	135	160	170	180	130
3	120	145	155	180	195	210	150
2	140	170	180	210	225	240	175
1	165	195	210	245	265	280	205
0	195	230	245	285	305	325	235
00	225	265	285	330	355	370	275
000	260	310	330	385	410	430	320
0000	300	360	385	445	475	510	370
250	340	405	425	495	530	....	410
300	375	445	480	555	590	....	460
350	420	505	530	610	655	....	510
400	455	545	575	665	710	....	555
500	515	620	660	765	815	....	630
600	575	690	740	855	910	....	710
700	630	755	815	940	1005	....	780
750	655	785	845	980	1045	....	810
800	680	815	880	1020	1085	....	845
900	730	870	940	....	....	....	905
1000	780	935	1000	1165	1240	....	965
1250	890	1065	1130	....	....	....	....
1500	980	1175	1260	1450	....	....	1215
1750	1070	1280	1370	....	....	....	....
2000	1155	1385	1470	1715	....	....	1405

**CORRECTION FACTOR FOR ROOM TEMPERATURES OVER 30 C. 86 F.**

C.	F.	.82	.88	.90	.94	.95	....
40	104	.82	.88	.90	.94	.95	....
45	113	.71	.82	.85	.90	.92	....
50	122	.58	.75	.80	.87	.89	....
55	131	.41	.67	.74	.83	.86	....
60	140	....	.58	.67	.79	.83	.91
70	158	....	.35	.52	.71	.76	.87
75	167	....	....	.43	.66	.72	.86
80	176	....	....	.30	.61	.69	.84
90	194	....	....	....	.50	.61	.80
100	212	....	....	....	....	.51	.77
120	248	....	....	....	....	....	.69
140	284	....	....	....	....	....	.59

**CORRECTION FACTOR FOR ROOM TEMPERATURES OVER 30 C. 86 F.**

C.	F.	.82	.88	.90	.94	.95	....
40	104	.82	.88	.90	.94	.95	....
45	113	.71	.82	.85	.90	.92	....
50	122	.58	.75	.80	.87	.89	....
55	131	.41	.67	.74	.83	.86	....
60	140	....	.58	.67	.79	.83	.91
70	158	....	.35	.52	.71	.76	.87
75	167	....	....	.43	.66	.72	.86
80	176	....	....	.30	.61	.69	.84
90	194	....	....	....	.50	.61	.80
100	212	....	....	....	....	.51	.77
120	248	....	....	....	....	....	.69
140	284	....	....	....	....	....	.59

## ISOLATION BY ELEVATION

Distance of Live Parts Above the Floor or Other Working Surface

Voltage Between Phases	Minimum Vertical Clearance of Unguarded Parts Feet	Inches
600	8	0
2300	8	0
6600	8	0
11000	9	0
22000	9	3
33000	9	6
44000	9	10
66000	10	5
88000	11	0
110000	11	7
132000	12	2

## WORKING SPACE

Minimum Clear Space Adjacent to Live Parts

Voltage Between Phases	Minimum Horizontal Clearance of Unguarded Parts Feet	Inches
600	3	2
2300	3	3
6600	3	4
11000	3	6
22000	3	9
33000	4	0
44000	4	4
66000	4	11
88000	5	6
110000	6	1
132000	6	8

## MAXIMUM NUMBER OF CONDUCTORS IN BOXES

Deep Boxes				
Box Dimensions Trade Size	No. 14	No. 12	No. 10	No. 8
1-1/2 x 3-1/4 octagonal	5	5	4	0
1-1/2 x 4 octagonal	8	7	6	5
1-1/2 x 4 square	11	9	7	5
1-1/2 x 4-11/16 square	16	12	10	8
2-1/8 x 4-11/16 square	20	16	12	10
2 x 1-3/4 x 2-3/4	5	4	4	
2-1/2 x 1-3/4 x 2-3/4	6	6	5	
3 x 1-3/4 x 2-3/4	7	7	6	
Shallow Boxes of Less Than 1 1/4" Depth				
Box Dimensions Trade Size	No. 14	No. 12	No. 10	No. 8
3-1/4	4	4	3	
4	6	6	4	
4-11/16	8	6	6	
Combinations				
Size of Conductor	Free Space Within Box For Each Conductor			
No. 14	2. cubic inches			
No. 12	2.25 cubic inches			
No. 10	2.5 cubic inches			
No. 8	3. cubic inches			

## FULL-LOAD CURRENT\* Single-Phase A-C Motors

HP	115V	230V	440V
1/6	3.2	1.6	
1/4	4.6	2.3	
1/2	7.4	3.7	
3/4	10.2	5.1	
1	13.	6.5	
1 1/2	18.4	9.2	
2	24.	12.	
3	34.	17.	
5	56.	28.	
7 1/2	80.	40.	21.
10	100.	50.	26.

## FULL-LOAD CURRENT\* Three-Phase A-C Motors

Induction Type Squirrel-Cage and Wound Rotor Amperes

Synchronous Type Unity Power Factor Amperes

## FULL-LOAD CURRENT\* Direct-Current Motors

HP	115V	230V	550V
1/6	4.6	2.3	.....
1/4	6.6	3.3	1.4
1	8.6	4.3	1.8
1 1/2	12.6	6.3	2.6
2	16.4	8.2	3.4
3	24.	12.	5.0
5	40	20.	8.3
7 1/2	58	29.	12.0
10	76.	38	16.0
15	112	56	23.0
20	148	74	31.
25	184	92	38.
30	220	110	46.
40	292	146	61
50	360	180	75
60	430	215	90
75	536	268	111
100		355	148.

\* These values for full-load current are average for all speeds.

HP	110V	230V	440V	550V	2300V	220V	440V	550V	2300V
1/6	4	2	1	.8	—	—	—	—	—
1/4	5.6	2.8	1.4	1.1	—	—	—	—	—
1	7	3.5	1.8	1.4	—	—	—	—	—
1 1/2	10	5	2.5	2.0	—	—	—	—	—
2	13	6.5	3.3	2.6	—	—	—	—	—
3	—	9	4.5	4	—	—	—	—	—
5	—	15	7.5	6	—	—	—	—	—
7 1/2	—	22	11	9	—	—	—	—	—
10	—	27	14	11	—	—	—	—	—
15	—	40	20	16	—	—	—	—	—
20	—	52	26	21	—	—	—	—	—
25	—	64	32	26	7	54	27	22	5.4
30	—	78	39	31	8.5	65	33	26	6.5
40	—	104	52	41	10.5	86	43	35	8
50	—	125	63	50	13	108	54	44	10
60	—	150	75	60	16	128	64	51	12
75	—	185	93	74	19	161	81	65	15
100	—	246	123	98	25	211	106	85	20
125	—	310	155	124	31	264	132	106	25
150	—	360	180	144	37	—	158	127	30
200	—	480	240	192	49	—	210	168	40

For full-load currents of 208 and 200 volt motors, increase the corresponding 230-volt motor full-load current by 6 and 10 per cent, respectively.

\* These values of full-load current are for motors running at speeds usual for belted motors and motors with normal torque characteristics. Motors built for especially low speeds or high torques may require more running current, in which case the nameplate current ratings should be used.

† For 90 and 80 per cent P. F. the above figure should be multiplied by 1.1 and 1.35 respectively.

# CODE TABLES (continued)

## NUMBER OF CONDUCTORS IN CONDUIT OR TUBING Rubber Covered, Types RF-32, RUF, R, RH, RW, RU, and RUW Thermoplastic, Types TF, T and TW One to Nine Conductors

Size AWG MCM	Number of Conductors in one Conduit or Tubing								
	1	2	3	4	5	6	7	8	9
18	1	1	1	1	1	1	1	1	1
16	1	1	1	1	1	1	1	1	1
14	1	1	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
0	1	1	1	1	1	1	1	1	1
00	1	1	1	1	1	1	1	1	1
000	1	1	1	1	1	1	1	1	1
0000	1	1	1	1	1	1	1	1	1
250	1	1	1	1	1	1	1	1	1
300	1	1	1	1	1	1	1	1	1
350	1	1	1	1	1	1	1	1	1
400	1	1	1	1	1	1	1	1	1
500	1	1	1	1	1	1	1	1	1
600	2	2	2	2	2	2	2	2	2
700	2	2	2	2	2	2	2	2	2
750	2	2	2	2	2	2	2	2	2
800	2	2	2	2	2	2	2	2	2
900	2	2	2	2	2	2	2	2	2

\* Where a service run of conduit or electrical metallic tubing does not exceed 50 feet in length and does not contain more than the equivalent of two quarter bends from end to end two No. 4 insulated and one No. 4 bare conductors may be installed in 1-inch conduit or tubing.

## NUMBER OF CONDUCTORS IN CONDUIT OR TUBING Lead-Covered Types RL and RHL-600 V..

Size AWG MCM	Number of Conductors in One Conduit or Tubing											
	Single Conductor Cable				2-Conductor Cable				3-Conductor Cable			
	1	2	3	4	1	2	3	4	1	2	3	4
14	1	1	1	1	1	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1	1	1	1
0	1	1	1	1	1	1	1	1	1	1	1	1
00	1	1	1	1	1	1	1	1	1	1	1	1
000	1	1	1	1	1	1	1	1	1	1	1	1
0000	1	1	1	1	1	1	1	1	1	1	1	1
250	1	1	1	1	1	1	1	1	1	1	1	1
300	1	1	1	1	1	1	1	1	1	1	1	1
350	1	1	1	1	1	1	1	1	1	1	1	1
400	1	1	1	1	1	1	1	1	1	1	1	1
500	1	1	1	1	1	1	1	1	1	1	1	1
600	2	2	2	2	2	2	2	2	2	2	2	2
700	2	2	2	2	2	2	2	2	2	2	2	2
750	2	2	2	2	2	2	2	2	2	2	2	2
800	2	2	2	2	2	2	2	2	2	2	2	2
900	2	2	2	2	2	2	2	2	2	2	2	2

## NUMBER OF CONDUCTORS IN CONDUIT OR TUBING More Than Nine Conductors Rubber-Covered Types RF-32, RUF, R, RH, RW, RU, RUW, RW Thermoplastic Types TF, T, and TW

Size AWG	Maximum Number of Conductors in Conduit or Tubing							
	1/2 inch	1 inch	1 1/2 inch	2 inch	2 1/2 inch	3 inch	3 1/2 inch	4 inch
18	12	20	35	49	80	115	176	176
16	10	17	30	41	68	97	150	150
14		10	18	25	40	59	90	90
12			15	21	35	50	77	77
10			13	17	29	41	64	64
8				10	17	25	38	38
6					15	23	23	23

## DIMENSIONS OF RUBBER-COVERED AND THERMOPLASTIC-COVERED CONDUCTORS

Size AWG MCM	Types RF-32, R, RH, RW		TF, T, TW, RU** RUF, RUW	
	Approx. Diam. Inches	Approx. Area Sq. Ins.	Approx. Diam. Inches	Approx. Area Sq. Ins.
18	.146	.0167	.106	.0088
16	.158	.0196	.118	.0109
14	2/64 in. .171	.0230	.131	.0135
14	3/64 in. .204*	.0327*		
12	2/64 in. .188	.0278	.148	.0172
12	3/64 in. .221*	.0384*		
10	.242	.0460	.168	.0224
8	.311	.0760	.228	.0408
6	.397	.1238	.323	.0819
4	.452	.1605	.372	.1087
3	.481	.1817	.401	.1263
2	.513	.2067	.433	.1473
1	.588	.2715	.508	.2027
0	.629	.3107	.549	.2367
00	.675	.3578	.595	.2781
000	.727	.4151	.647	.3288
0000	.785	.4840	.705	.3904
250	.868	.5917	.788	.4877
300	.933	.6837	.843	.5581
350	.985	.7620	.895	.6291
400	1.032	.8365	.942	.6969
500	1.119	.9834	1.029	.8316
600	1.233	1.1940	1.143	1.0261
700	1.304	1.3355	1.214	1.1575
750	1.339	1.4082	1.249	1.2252
800	1.372	1.4784	1.282	1.2908
900	1.435	1.6173	1.345	1.4208

\*The dimensions of Type RW wire. Also, these dimensions to be used for new work in computing size of conduit or tubing for combinations of wires not shown in table 4.  
\*\*No. 14 to No. 2.  
No. 18 to No. 8, solid; No. 6 and larger, stranded.

## DIMENSIONS OF LEAD-COVERED CONDUCTORS Types RL, RHL, and RUL

Size AWG-MCM	Single Conductor		Two Conductor		Three Conductor	
	Diam. Inches	Area Sq. Ins.	Diam. Inches	Area Sq. Ins.	Diam. Inches	Area Sq. Ins.
14	.28	.062	.28 x .47	.115	.59	.273
12	.29	.066	.31 x .54	.146	.62	.301
10	.35	.096	.35 x .59	.180	.68	.363
8	.41	.132	.41 x .71	.255	.82	.528
6	.49	.188	.49 x .86	.369	.97	.738
4	.55	.237	.54 x .96	.457	1.08	.916
2	.60	.283	.61 x 1.08	.578	1.21	1.146
1	.67	.352	.70 x 1.23	.756	1.38	1.49
0	.71	.396	.74 x 1.32	.859	1.47	1.70
00	.76	.454	.79 x 1.41	.980	1.57	1.94
000	.81	.515	.84 x 1.52	1.123	1.69	2.24
0000	.87	.593	.90 x 1.64	1.302	1.85	2.68
250	.98	.754			2.02	3.20
300	1.04	.85			2.15	3.62
350	1.10	.95			2.36	4.02
400	1.14	1.02			2.40	4.52
500	1.23	1.18			2.59	5.28



## CONDUCTOR SIZES AND OVERCURRENT PROTECTION FOR MOTORS

The values shown for running protection in Columns 5 and 6 must be modified if nameplate full load current values are different. Conductor sizes shown in Columns 12 and 13 may be smaller for certain motors. The current values shown in Columns 5 and 6 must be reduced by 8 per cent for all motors other than open type motors marked to have a temperature rise not over 40 degrees C.

Full load current rating of motor amperes	Minimum size conductor in raceways For conductors in air or for other insulations see tables 1 and 2		For Running Protection of Motors		Maximum Allowable Rating or Setting of Branch Circuit Protective Devices					
	Type R		Maximum rating of non-adjustable protective devices	Maximum setting of adjustable protective device	With Code Letters Single-phase and squirrel cage and synchronous. Full voltage, resistor or reactor starting, Code letters F to R inc. Without Code Letters Same as above.	With Code Letters Single-phase and squirrel cage and synchronous. Full voltage, resistor or reactor starting, Code letters B to E inc. Auto-transformer starting, Code letters F to R inclusive	With Code Letters Squirrel cage and synchronous Auto-transformer starting, Code letters B to E inclusive	With Code Letters All motors. Code letter A. Without Code Letters DC and wound-rotor motors		
	Type T	Type RH								
Col. No. 1	2	3	Amperes 5	Amperes 6	7	8	9	10		
1	14	14	2	1.25	15	15	15	15		
2	14	14	3	2.50	15	15	15	15		
3	14	14	4	3.75	15	15	15	15		
4	14	14	6	5.0	15	15	15	15		
5	14	14	8	6.25	15	15	15	15		
6	14	14	8	7.50	20	15	15	15		
7	14	14	10	8.75	20	20	15	15		
8	14	14	10	10.0	25	20	20	15		
9	14	14	12	11.25	30	25	20	15		
10	14	14	15	12.50	30	30	25	15		
11	14	14	15	13.75	35	30	25	20		
12	14	14	15	15.00	40	30	25	20		
13	12	12	20	16.25	40	35	30	20		
14	12	12	20	17.50	45	35	30	25		
15	12	12	20	18.75	45	40	30	25		
16	12	12	20	20.00	50	40	35	25		
17	10	10	25	21.25	60	45	35	30		
18	10	10	25	22.50	60	45	40	30		
19	10	10	25	23.75	60	50	40	30		
20	10	10	25	25.0	60	50	40	30		
22	10	10	30	27.50	70	60	45	35		
24	10	10	30	30.00	80	60	50	40		
26	8	10	35	32.50	80	70	60	40		
28	8	10	35	35.00	90	70	60	45		
30	8	8	40	37.50	90	70	60	45		
32	8	8	40	40.00	100	80	70	50		
34	6	8	45	42.50	110	90	70	60		
36	6	8	45	45.00	110	90	80	60		
38	6	6	50	47.50	125	100	80	60		
40	6	6	50	50.00	125	100	80	60		
42	6	6	50	52.50	125	110	90	70		
44	6	6	60	55.0	125	110	90	70		
46	4	6	60	57.50	150	125	100	70		
48	4	6	60	60.0	150	125	100	80		
50	4	6	60	62.50	150	125	100	80		
52	4	6	70	65.0	175	150	110	80		
54	4	4	70	67.50	175	150	110	90		
56	4	4	70	70.00	175	150	120	90		
58	3	4	70	72.50	175	150	120	90		
60	3	4	80	75.00	200	150	120	90		
62	3	4	80	77.50	200	175	125	100		
64	3	4	80	80.00	200	175	150	100		
66	2	4	80	82.50	200	175	150	100		
68	2	4	90	85.00	225	175	150	110		
70	2	3	90	87.50	225	175	150	110		
72	2	3	90	90.00	225	200	150	110		
74	2	3	90	92.50	225	200	150	125		
76	2	3	100	95.00	250	200	175	125		
78	1	3	100	97.50	250	200	175	125		
80	1	3	100	100.00	250	200	175	125		
82	1	2	110	102.50	250	225	175	125		
84	1	2	110	105.00	250	225	175	150		
86	1	2	110	107.50	300	225	175	150		
88	1	2	110	110.00	300	225	200	150		
90	0	2	110	112.50	300	225	200	150		
92	0	2	125	115.00	300	250	200	150		
94	0	1	125	117.50	300	250	200	150		
96	0	1	125	120.00	300	250	200	150		
98	0	1	125	122.50	300	250	200	150		
100	0	1	125	125.00	300	250	200	150		
108	00	1	150	131.5	350	300	225	175		
110	00	0	150	137.5	350	300	225	175		
115	00	0	150	144.0	350	300	250	175		
120	000	0	150	150.0	400	300	250	200		
125	000	00	175	156.5	400	350	250	200		
130	000	00	175	162.5	400	350	300	200		
135	0000	00	175	169.0	450	350	300	225		
140	0000	00	175	175.0	450	350	300	225		
145	0000	000	200	181.5	450	400	300	225		
150	0000	000	200	187.5	450	400	300	225		
155	0000	000	200	194.0	500	400	350	250		
160	250	000	200	200.0	500	400	350	250		
165	250	0000	225	206.	500	450	350	250		
170	250	0000	225	213.	500	450	350	300		
175	300	0000	225	219.	600	450	350	300		
180	300	0000	225	225.	600	450	400	300		
185	300	0000	290	231.	600	500	400	300		
190	300	250	250	238.	600	500	400	300		
195	350	250	250	244.	600	500	400	300		
200	350	250	250	250.	600	500	400	300		
210	400	300	250	263.	....	600	450	350		
220	400	300	300	275.	....	600	450	350		
230	500	300	300	288.	....	600	500	350		
240	500	350	300	300.	....	600	500	400		



# CONVERSION FACTORS

These units	multiplied by	equal	These units	multiplied by	equal
amperes per square cm.	6.452	amperes per sq. inch.	ergs per second	$1.341 \times 10^{-10}$	horse-power.
ampere-turns	1.257	gilberts.		$10^{-10}$	kilowatts.
ampere-turns per cm.	2.540	ampere-turns per inch.	feet of water	62.43	pounds per square foot.
British thermal units	778.3	foot pounds.		0.4335	pounds per square inch.
	$3.931 \times 10^{-4}$	horse-power-hours.	feet per minute	0.01667	feet per second.
	1055	joules.		0.01136	miles per hour.
	$2.930 \times 10^{-4}$	kilowatt hours.	feet per second	0.5921	knots.
B.t.u. per min.	12.97	foot-pounds per sec.		0.6818	miles per hour.
	0.02357	horse-power.		0.01136	miles per minute.
	0.01758	kilowatts.	feet per second per second	0.6818	miles per hour per sec.
	17.58	watts.	foot-pounds	$1.285 \times 10^{-3}$	British thermal units.
B.t.u. per sq. ft. per min.	0.1221	watts per square inch.		$1.356 \times 10^7$	ergs.
centimeters	$3.281 \times 10^{-2}$	feet.		$5.050 \times 10^{-7}$	horse-power-hours.
	0.3937	inches.		1.356	joules.
	$6.214 \times 10^{-5}$	miles.		$3.766 \times 10^{-7}$	kilowatt-hours.
	393.7	mils.	foot-pounds per minute	$1.285 \times 10^{-3}$	B.t. units per minute.
	$1.094 \times 10^{-2}$	yards.		0.01667	foot pounds per second.
centimeter-dynes	$7.376 \times 10^{-8}$	pound-feet.		$3.030 \times 10^{-5}$	horse-power.
centimeter-grams	$7.233 \times 10^{-5}$	pound-feet.		$2.260 \times 10^{-5}$	kilowatts.
centimeters per second	1.969	feet per minute.	foot-pounds per second	$7.709 \times 10^{-2}$	B.t. units per minute.
	0.03281	feet per second.		$1.818 \times 10^{-3}$	horse-power.
	0.02237	miles per hour.		$1.356 \times 10^{-3}$	kilowatts.
	$3.728 \times 10^{-4}$	miles per minute.	gallons	0.1337	cubic feet.
cms. per sec. per sec.	0.03281	feet per sec. per sec.		231	cubic inches.
circular mils	$7.854 \times 10^{-7}$	square inches.	gallons per minute	$2.228 \times 10^{-3}$	cubic feet per second.
	0.7854	square mils.	gausses	6.452	lines per square inch.
cubic centimeters	$3.531 \times 10^{-5}$	cubic feet.	gilberts	0.7958	ampere-turns.
	$6.102 \times 10^{-2}$	cubic inches.	gilberts per centimeter	2.021	ampere-turns per inch.
cubic feet	1728	cubic inches.	grams	980.7	dynes.
	0.03704	cubic yards.		15.43	grains.
	7.481	gallons.		0.03527	ounces.
	59.84	pints (liq.).		0.03215	ounces (troy).
	29.92	quarts (liq.).		$2.205 \times 10^{-3}$	pounds.
cubic feet per minute	0.1247	gallons per sec.	horse-power	42.40	B.t. units per min.
	62.4	pounds of water per min.		33,000	foot-pounds per minute.
cubic inches	$5.787 \times 10^{-4}$	cubic feet.		550	foot-pounds per second.
	$2.143 \times 10^{-1}$	cubic yards.		1.014	horse-power (metric).
	$4.329 \times 10^{-3}$	gallons.		0.7457	kilowatts.
	$1.061 \times 10^5$	mil-feet.		745.7	watts.
	0.03463	pints (liq.).	horse-power (boiler)	33.520	B.t.u. per hour.
	0.01732	quarts (liq.).		9.804	kilowatts.
cubic meters	35.31	cubic feet.	horse-power-hours	2544	British thermal units.
	61,023	cubic inches.		$1.98 \times 10^4$	foot-pounds.
	1.308	cubic yards.		$2.684 \times 10^4$	joules.
	264.2	gallons.		0.7455	kilowatt-hours.
	2113	pints (liq.).	inches	$8.333 \times 10^{-2}$	feet.
	1057	quarts (liq.).		$1.578 \times 10^{-5}$	miles.
cubic yards	27	cubic feet.		$10^3$	mils.
	202.0	gallons.		$2.778 \times 10^{-2}$	yards.
cubic yards per minute	0.45	cubic feet per second.	inches of water	0.5781	ounces per square inch.
	3.367	gallons per second.		5.204	pounds per square foot.
degrees (angle)	60	minutes.		0.03613	pounds per square inch.
	0.01745	radians.	joules (Int.)	$9.480 \times 10^{-4}$	British thermal units.
	3600	seconds.		$10^7$	ergs.
degrees per second	0.01745	radians per second.		0.7378	foot-pounds.
	0.1667	revolutions per minute.		$2.778 \times 10^{-4}$	watt-hours.
	0.002778	revolutions per second.	kilograms	980.665	dynes.
dynes	$2.248 \times 10^{-5}$	pounds.		2.205	pounds.
ergs	$9.480 \times 10^{-11}$	British thermal units.		$1.102 \times 10^{-3}$	tons (short).
	1	dyne-centimeters.	kilolines	$10^3$	maxwells.
	$7.378 \times 10^{-8}$	foot-pounds.	kilowatts	56.88	B.t. units per min.
	$10^{-7}$	joules.		$4.427 \times 10^4$	foot-pounds per min.
ergs per second	$5.688 \times 10^{-9}$	B.t. units per minute.		737.8	foot-pounds per sec.
	$4.427 \times 10^{-4}$	foot-pounds per minute.		1.341	horse-power.
	$7.378 \times 10^{-4}$	foot-pounds per second.		$10^3$	watts.

# CONVERSION FACTORS (continued)

These units	multiplied by	equal	These units	multiplied by	equal
kilowatt-hours	3413 2.656X10 <sup>4</sup> 1.341 3.6X10 <sup>4</sup>	British thermal units. foot-pounds. horse-power-hours. joules.	quarts (dry)	67.20	cubic inches.
lines per square cm.	1	gausses.	quarts (liq.)	3.342X10 <sup>-3</sup> 57.75	cubic feet. cubic inches.
lines per square inch	0.1550	gausses.	radians	57.30 3438 0.6366	degrees. minutes. quadrants.
lumens per sq. ft.	1	foot-candles.	radians per second	57.30 9.549 0.1592	degrees per second. revolutions per minute. revolutions per second.
maxwells	10 <sup>-3</sup>	kilolines.	revolutions	360 4 6.283	degrees. quadrants. radians.
megalines	10 <sup>4</sup>	maxwells.	revolutions per minute	6 0.1047 0.01667	degrees per second. radians per second. revolutions per second.
megohms	10 <sup>6</sup>	ohms.	revolutions per second	360 6.283 60	degrees per second. radians per second. revs. per minute.
meters	3.281 39.37 6.214X10 <sup>-4</sup>	feet. inches. miles.	revs. per sec. per sec.	6.283 3600 60	radians per sec. per sec. revs. per min. per min. revs. per min. per sec.
meters per minute	3.281 0.05468 0.03728	feet per minute. feet per second. miles per hour.	seconds (angle)	4.848X10 <sup>-4</sup>	radians.
meters per second	196.8 3.281 2.237 0.03728	feet per minute. feet per second. miles per hour. miles per minute.	square centimeters	1.973X10 <sup>4</sup> 1.076X10 <sup>-3</sup> 0.1550	circular mils. square feet. square inches.
microhms	10 <sup>-12</sup> 10 <sup>-6</sup>	megohms. ohms.	square feet	2.296X10 <sup>-4</sup> 1.833X10 <sup>4</sup> 144	acres. circular mils. square inches.
miles	5280 6.336X10 <sup>4</sup>	feet. inches.	square inches	1.273X10 <sup>4</sup> 6.944X10 <sup>-3</sup> 10 <sup>4</sup>	circular mils. square feet. square mils.
miles per hour	88 1.467	feet per minute. feet per second.	square meters	2.471X10 <sup>-4</sup> 10.76 1550 3.861X10 <sup>-7</sup>	acres. square feet. square inches. square miles.
miles per hr. per sec.	1.467	feet per sec. per sec.	square miles	640 27.88X10 <sup>4</sup> 3.098X10 <sup>4</sup>	acres. square feet. square yards.
miles per minute	88 52.10 60	feet per second. knots. miles per hour.	square millimeters	1.973X10 <sup>4</sup>	circular mils.
mil-feet	9.425X10 <sup>-4</sup>	cubic inches.	square mils	1.273 10 <sup>-4</sup>	circular mils. square inches.
millihenries	10 <sup>-3</sup>	henries.	square yards	9 3.228X10 <sup>-7</sup>	square feet. square miles.
millimeters	3.281X10 <sup>-3</sup> 0.03937 6.214X10 <sup>-7</sup> 39.37	feet. inches. miles. mils.	temp. (deg. Cent.) + 273	1	abs. temp. (deg. Cent.).
mils	8.333X10 <sup>-3</sup> 10 <sup>-3</sup>	feet. inches.	temp. (deg. Cent.) + 17.8	1.8	temp. (deg. Fahr.).
minutes (angle)	2.909X10 <sup>-4</sup>	radians.	temp. (deg. Fahr.) + 460	1	abs. temp. (deg. Fahr.).
ohms	10 <sup>-6</sup> 10 <sup>6</sup>	megohms. microhms.	temp. (deg. Fahr.) - 32	5/9	temp. (deg. Cent.).
ounces	0.0625	pounds.	tons (long)	2240	pounds.
ounces (troy)	480 0.08333	grains. pounds (troy).	tons (metric)	2205	pounds.
ounces per square inch	0.0625	pounds per square inch.	tons (short)	2000	pounds.
pounds	444.823 16	dynes. ounces.	tons (short) per sq. ft.	13.89	pounds per square inch.
pounds (troy)	0.8229	pounds (av.).	tons (short) per sq. in.	2000	pounds per square inch.
pounds-feet squared	144	pounds-inches squared.	watts	0.05688 10 <sup>7</sup> 44.27 0.7378 1.341X10 <sup>-3</sup> 10 <sup>-3</sup>	B.t. units per min. ergs per second. foot-pounds per min. foot-pounds per second. horse-power. kilowatts.
pounds-inches squared	6.945X10 <sup>-3</sup>	pounds-feet squared.	watt-hours	3.413 2656 1.341X10 <sup>-3</sup> 10 <sup>-3</sup>	British thermal units. foot-pounds. horse-power-hours. kilowatt-hours.
pounds of water	0.01602 27.68 0.1198	cubic feet. cubic inches. gallons.	webers	10 <sup>8</sup>	maxwells.
pounds of water per min.	2.669X10 <sup>-4</sup>	cubic feet per sec.	yards	3 36 5.682X10 <sup>-4</sup>	feet. inches. miles.
pounds per cubic foot	5.787X10 <sup>-4</sup> 5.456X10 <sup>-9</sup>	pounds per cubic inch. pounds per mil foot.			
pounds per cubic inch	1728 9.425X10 <sup>-4</sup>	pounds per cubic foot. pounds per mil foot.			
pounds per square foot	0.01602 6.944X10 <sup>-3</sup>	feet of water. pounds per square inch.			
pounds per square inch	2.307 144	feet of water. pounds per square foot.			
quadrants (angle)	90 5400 1.571	degrees. minutes. radians.			

# CONVERSION TABLES

KILOWATTS TO HORSEPOWER					
kw	hp	kw	hp	kw	hp
1	1.341	30	40.218	130	174.28
2	2.681	32	42.899	140	187.68
3	4.022	34	45.580	150	201.09
4	5.363	36	48.261	160	214.50
5	6.703	38	50.943	170	227.90
6	8.044	40	53.624	180	241.31
7	9.384	42	56.305	190	254.71
8	10.725	44	58.986	200	268.12
9	12.065	46	61.667	220	294.93
10	13.406	48	64.349	240	321.74
11	14.747	50	67.030	260	348.56
12	16.087	55	73.733	280	375.37
13	17.428	60	80.436	300	402.18
14	17.768	65	87.139	325	435.49
15	20.109	70	93.842	350	469.21
16	21.450	75	100.545	400	536.24
17	22.790	80	107.248	450	603.27
18	24.131	85	113.951	500	670.30
19	25.471	90	120.654	600	804.36
20	26.812	95	127.357	700	938.42
22	29.493	100	134.060	800	1072.48
24	32.174	110	147.47	900	1206.54
26	34.856	120	160.87	1000	1340.60
28	37.537				

HORSEPOWER TO KILOWATTS					
hp	kw	hp	kw	hp	kw
1	.746	30	22.380	130	96.98
2	1.492	32	23.872	140	104.44
3	2.238	34	25.364	150	111.90
4	2.984	36	26.856	160	119.36
5	3.730	38	28.348	170	126.82
6	4.476	40	29.840	180	134.28
7	5.222	42	31.332	190	141.74
8	5.968	44	32.824	200	149.20
9	6.714	46	34.316	220	164.12
10	7.460	48	35.808	240	179.04
11	8.206	50	37.300	260	193.96
12	8.952	55	41.03	280	208.88
13	9.698	60	44.76	300	223.80
14	10.444	65	48.49	325	242.45
15	11.190	70	52.22	350	261.1
16	11.936	75	55.95	400	298.4
17	12.682	80	59.68	450	335.7
18	13.428	85	63.41	500	373.0
19	14.174	90	67.14	600	447.6
20	14.920	95	70.87	700	522.2
22	16.412	100	74.60	800	596.8
24	17.904	110	82.06	900	671.4
26	19.396	120	89.52	1000	746.0
28	20.888				

Note: Conversions not given may be obtained by adding appropriate given values.

DECIMAL EQUIVALENTS			
Fraction	Decimal	Fraction	Decimal
1/64 =	0.015625	33/64 =	0.515625
1/32 =	0.031250	17/32 =	0.531250
3/64 =	0.046875	35/64 =	0.546875
1/16 =	0.062500	9/16 =	0.562500
5/64 =	0.078125	37/64 =	0.578125
3/32 =	0.093750	19/32 =	0.593750
7/64 =	0.109375	39/64 =	0.609375
1/8 =	0.125000	5/8 =	0.625000
9/64 =	0.140625	41/64 =	0.640625
5/32 =	0.156250	21/32 =	0.656250
11/64 =	0.171875	43/64 =	0.671875
3/16 =	0.187500	11/16 =	0.687500
13/64 =	0.203125	45/64 =	0.703125
7/32 =	0.218750	23/32 =	0.718750
15/64 =	0.234375	47/64 =	0.734375
1/4 =	0.250000	3/4 =	0.750000
17/64 =	0.265625	49/64 =	0.765625
9/32 =	0.281250	25/32 =	0.781250
19/64 =	0.296875	51/64 =	0.796875
5/16 =	0.312500	13/16 =	0.812500
21/64 =	0.328125	53/64 =	0.828125
11/32 =	0.343750	27/32 =	0.843750
23/64 =	0.359375	55/64 =	0.859375
3/8 =	0.375000	7/8 =	0.875000
25/64 =	0.390625	57/64 =	0.890625
13/32 =	0.406250	29/32 =	0.906250
27/64 =	0.421875	59/64 =	0.921875
7/16 =	0.437500	15/16 =	0.937500
29/64 =	0.453125	61/64 =	0.953125
15/32 =	0.468750	31/32 =	0.968750
31/64 =	0.484375	63/64 =	0.984375
1/2 =	0.500000		

TEMPERATURE			
Centigrade	Fahrenheit	Centigrade	Fahrenheit
-18	-0.4	52	125.6
-16	3.2	54	129.2
-14	6.8	56	132.8
-12	10.4	58	136.4
-10	14.0	60	140.0
-8	17.6	62	143.6
-6	21.2	64	147.2
-4	24.8	66	150.8
-2	28.4	68	154.4
* 0	32.0	70	158.0
2	35.6	72	161.6
4	39.2	74	165.2
6	42.8	76	168.8
8	46.4	78	172.4
10	50.0	80	176.0
12	53.6	82	179.6
14	57.2	84	183.2
16	60.8	86	186.8
18	64.4	88	190.4
20	68.0	90	194.0
22	71.6	92	197.6
24	75.2	94	201.2
26	78.8	96	204.8
28	82.4	98	208.4
30	86.0	**100	212.0
32	89.6	102	215.6
34	93.2	104	219.2
36	96.8	106	222.8
38	100.4	108	226.4
40	104.0	110	230.0
42	107.6	112	233.6
44	111.2	114	237.2
46	114.8	116	240.8
48	118.4	118	244.4
50	122.0	120	248.0

\*Freezing

\*\*Boiling

$$\text{Conversion Method } F = \frac{9}{5}C + 32$$

$$C = \frac{5}{9}(F - 32)$$

# MOTOR SELECTION CHART

Basic Motor Types	HP Ratings	Motor Operating Classifications	Application Data
Direct-current motors 115, 230 volts d.c.	Fractional to several hundred hp.	Series-wound	For high starting torque, with speed control depending upon load—cranes, hoists, elevators, electric railway cars, locomotives and trucks. In fractional hp. sizes—sewing machines, vacuum cleaners, electric fans, and hair driers (usually the universal type motor).
	Fractional to several thousand hp.	Shunt-wound	For constant-speed or adjustable-speed, with good speed regulation—drives for milling machines, centrifugal pumps, lathes, conveyors, grinders, blowers, shapers and elevators.
		Compound-wound	Offers constant-speed and variable-speed action, with a definite zero load speed and high starting torque. Used with fly wheels on punch presses, power shears, hoists, rolling mill drives and conveyors.
Universal motor 115, 230 volts d.c. or 1 phase a.c.	Fractional and several hundred hp.	Series-wound or compensated series-wound	A special adaptation of the direct-current series motor. Applications are same as for fractional hp. d.c. series type. In larger sizes, for electric railways.
Single-phase a.c. motors 110-220-440-550 volts	Fractional hp.	Shaded-pole induction motor	For small appliances and devices requiring low starting torque—small fans, motion picture projectors and similar small constant-speed devices.
	Fractional to 5 hp.	Split-phase start induction motor	For moderate starting torque and constant-speed—small machine tools, oil burner motors and small appliances.
		Reactor-start split-phase induction motor	Same as split-phase start induction motor, but requires less starting current.
	Fractional to 15 hp.	Capacitor-start split-phase induction motor	For high starting torque, constant speed and low noise—air conditioning equipment, large fans and commercial refrigeration equipment.
		Capacitor-start and run induction motor	Similar to capacitor-start split-phase induction motor, but in larger sizes, with increased power factor and smoother, quieter operation.
	Fractional to 40 hp.	Repulsion motor	For varying-speed, high starting torque and low starting current—pumps, stokers, conveyors, compressors and similar applications when polyphase current is not available.
		Compensated repulsion motor	Similar to repulsion motor, but with improved power factor and constant- or varying speed.
		Repulsion-induction motor	Similar to repulsion motor, but with constant- or varying-speed.
		Repulsion-start induction motor	Similar to repulsion motor, with high starting torque and fairly constant speed.
	1/4 to 400 hp.	Squirrel-cage induction motor	For high reliability and efficiency at essentially constant-speed, requiring little maintenance. Depending upon construction, classifications are as follows: normal-torque, normal starting current; normal-torque, low starting current; high-torque, low starting current; high-slip; low starting torque, normal starting current; low starting torque, low starting current. For rotary compressors, machine tools, large fans, light conveyors, milling machines, agitators, elevators, hoists, punch presses, centrifugal pumps and blowers.
3-phase a.c. motors 208-220-440-550-2200-2300-4000 volts	1/2 to several thousand hp.	Wound-rotor (slip-ring) induction motor	For limited speed control and speed adjustments under fluctuating load, with low starting current—conveyors, fans, lift bridges, cranes, hoists and drives for metal-rolling mills.
	20 to several thousand hp.	Synchronous	For power factor correction and for exact slow-speed drives and maximum efficiency on continuous loads above 75 hp.



# VOLTAGE DROP TABLES

## AVERAGE CIRCUIT LENGTHS (FEET) FOR 1% VOLTAGE DROP

AMPERE LOAD	WIRE SIZE—CIRCULAR MILS					WIRE SIZE—B & S or A.W.G.									
	500	400	350	300	250	4/0	3/0	2/0	1/0	1	2	3	4	6	8
40	1166	898	788	669	558	475	378	299	239	188	150	119	94	59	38
50	885	719	630	535	447	380	303	240	191	150	120	91	75	47	30
60	737	599	525	446	372	317	252	200	159	125	100	79	62	39	
70	632	513	450	382	319	271	214	171	136	107	86	68	53	34	
80	553	449	394	334	279	238	189	150	119	94	75	59	47		
90	491	399	350	297	248	211	168	133	106	83	67	53	42		
100	442	359	315	267	223	190	151	120	95	75	60	47			
110	402	327	286	243	203	173	138	109	87	68	55				
120	369	299	263	223	184	158	126	100	79	63					
130	340	276	242	206	172	146	116	92	73	58					
140	316	257	225	191	159	124	100	84	68						
150	295	240	210	178	149	127	101	80	64						
160	276	225	197	167	140	119	95	75	60						
170	260	211	185	157	131	112	89	70							
180	246	200	175	148	124	106	84								
190	233	189	164	140	117	100	80								
200	221	180	157	134	112	95	76								
210	211	171	150	127	106	90									
220	201	163	143	122	101	86									
230	192	156	137	116	97	83									
240	184	150	131	111	93										
250	177	144	126	107	89										
260	170	138	121	103	88										
270	164	133	117	99											
280	158	128	112	96											
290	152	124	109	92											
300	147	120	105												
310	143	116	102												
320	138	112													
330	134	109													
340	130	106													

Calculations based on copper resistance of 12.5 ohms per CM-ft at 50C (122F).

Reactance and impedance losses calculated for each wire.

Conductors closely grouped in metallic conduit.

TABLE III. BALANCED LIGHTING LOADS  
3- and 4-Wire, 115 Volts 1% drop from supply cabinet to first outlet supplying permanently connected appliance or fixture.

AMPERES (A), WATTS (W), WITH CONDUIT CONDUCTOR (C), FEET (F)						
MAXIMUM OVERCURRENT CIRCUIT PROTECTION	INTERMITTENT LOADS			CONTINUOUS LOADS		
	100% F 2-3 C	80% F 4-6 C	70% F 7-9 C	100% F 2-3 C	80% F 4-6 C	70% F 7-9 C
15 A	15 A 1725 W	12 A 1380 W	10.5 A 1207 W	12 A 1380 W	9.6 A 1104 W	8.4 Amps. 966 Watts
20 A	20 A 2300 W	16 A 1840 W	14 A 1610 W	16 A 1840 W	12.8 A 1472 W	11.2 A 1288 W
LOADS AND LENGTHS IN FEET FOR 1% DROP ON 3 AND 4 WIRE 115 V. CIRCUITS						
AMPERE LOAD	#10 WIRE	#12 WIRE	#14 WIRE			
1	946	596	374			
2	474	298	188			
3	314	198	124			
4	236	148	94			
5	190	120	76			
6	158	100	62			
7	138	86	54			
8	118	74	46			
9	106	66	42			
10	94	60	38			
11	86	54	34			
12	78	50	32			
13	72	46	28			
14	68	42	26			
15	64	40	24			
16	60	38				
17	56	36				
18	52	34				
19	50	32				
20	48	30				
21	46					
22	44					
23	42					
24	40					
25	38					
26	36					
27	34					
28	32					
29	32					
30	32					

Calculations based on copper resistance of 13 ohms per CM-ft at 60C (140F).

Calculations based on copper resistance of 13 ohms per CM-ft at 60C (140F).

AMPERE LOAD	WIRE SIZE—CIRCULAR MILS					WIRE SIZE—B & S or A.W.G.									
	500	400	350	300	250	4/0	3/0	2/0	1/0	1	2	3	4	6	8
40	710	625	584	530	475	429	364	303	253	208	173	139	113	75	49
50	548	500	467	424	380	343	291	242	203	167	139	111	90	60	39
60	473	417	389	353	317	286	243	202	169	139	115	92	75	50	
70	406	357	333	303	271	243	208	173	145	119	99	79	64	43	
80	355	312	292	265	238	214	182	151	127	104	87	69	56		
90	316	278	259	235	211	191	162	134	113	93	77	62	45		
100	284	250	233	212	190	172	146	121	101	83	69	55			
110	258	227	212	193	173	154	132	110	92	76	63				
120	237	208	195	177	158	143	121	101	84	69	58				
130	218	192	180	163	146	132	112	93	78	64					
140	203	179	167	151	136	123	104	86	72						
150	189	168	156	141	127	114	97	81	67						
160	177	156	146	132	119	107	91	76							
170	167	147	137	125	112	101	86	71							
180	158	139	130	118	106	95	81	67							
190	149	132	123	112	100	90	77								
200	142	125	117	106	95	86									
210	135	119	111	101	90	82									
220	129	114	106	96	86	78									
230	123	109	101	92	83	75									
240	118	104	97	88	79										
250	114	100	93	85	74										
260	109	96	90	81	73										
270	105	93	86	78											
280	101	89	83	76											
290	98	86	80	73											
300	95	83	78												
310	92	81	75												
320	89	78													
330	86	76													
340	83	73													
350	81														
360	79														
370	77														
380	75														

Calculations based on copper resistance of 12.5 ohms per CM-ft at 50C (122F).

Reactance and impedance losses calculated for each wire.

Conductors closely grouped in metallic conduit.

## NOTES:

### TABLE I:

Balanced 3-Wire Loads: Drop is 1.15 volts for given length.

2-Wire, 230-Volt Loads: Drop is 2.3 volts for given length.

### TABLE II:

For 208-volt, 4-wire "Y" feeders multiply given length by 0.9

For 230-volt, single-phase feeders multiply given length by 0.85

For 460-volt, 3- or 4-wire feeders multiply given lengths by 2.

For aluminum wire multiply given lengths by 0.7 or use length of copper wire which is 2 sizes smaller than the aluminum size under consideration.

### TABLE III:

For 2-phase, 3-wire circuits tapped off a 3-phase, 4-wire "Y" service, multiply given lengths by 0.67.

## DC CIRCUIT CHARACTERISTICS

Ohm's Law:

$$E = IR \quad I = \frac{E}{R} \quad R = \frac{E}{I}$$

E = voltage impressed on circuit (volts)

I = current flowing in circuit (amperes)

R = circuit resistance (ohms)

Resistances in Series:

$$R_t = R_1 + R_2 + R_3 + \dots \text{etc.}$$

R<sub>t</sub> = total resistance (ohms)

R<sub>1</sub>, R<sub>2</sub>, etc. = individual resistances (ohms)

Resistances in Parallel:

$$R_t = \frac{1}{\frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} + \dots \text{etc.}}$$

Formulae for the conversion of electrical and mechanical power:

$$HP = \frac{\text{watts}}{746} = \text{watts} \times .00134$$

$$= \frac{\text{kilowatts}}{.746} \quad \text{kilowatts} \times 1.34$$

$$\text{Kilowatts} = \text{watts} \div 1,000 \quad HP \times .746$$

$$\text{Watts} = HP \times 746$$

In direct current circuits, electrical power is equal to the product of the voltage and current:

$$P = EI = I^2R = \frac{E^2}{R}$$

P = power (watts)

E = voltage (volts)

I = current (amperes)

R = resistance (ohms)

Solving the basic formula for I, E, and R gives

$$I = \frac{P}{E} = \sqrt{\frac{P}{R}} \quad E = \frac{P}{I} \quad \sqrt{RP} \quad R = \frac{E^2}{P} \quad \frac{P}{I^2}$$

## ENERGY

Energy is the capacity for doing work. Electrical energy is expressed in kilowatt-hours (KWHR), one kilowatt-hour representing the energy expended by a power source of 1 KW over a period of 1 hour.

## EFFICIENCY

Efficiency of a machine, motor or other device is the ratio of the energy output (useful energy delivered by the machine) to the energy input (energy delivered to the machine), usually expressed as a percentage:

$$\text{Efficiency} = \frac{\text{output}}{\text{input}} \times 100\%$$

$$\text{or Output} = \frac{\text{input} \times \text{efficiency}}{100\%}$$

## TORQUE

Torque may be described as the measure of the tendency of a body to rotate. It is expressed in pound-feet or pounds of force acting at a certain radius:

Torque (pound-feet) = force tending to produce rotation (pounds)  $\times$  distance from center of rotation to point at which force is applied (feet).

Relations between torque and horsepower:

$$\text{Torque} = \frac{33,000 \times HP}{6.28 \times \text{rpm}}$$

$$HP = \frac{6.28 \times \text{rpm} \times \text{torque}}{33,000}$$

rpm = speed of rotating part (rev. per minute)

## AC CIRCUIT CHARACTERISTICS

The instantaneous values of an alternating current or voltage vary from zero to a maximum value each half cycle. In the practical formulae which follow, the "effective value" of current and voltage is used, defined as follows:

Effective value = 0.707  $\times$  maximum instantaneous value

Impedance:

Impedance is the total opposition to the flow of alternating current. It is a function of resistance, capacitive reactance and inductive reactance. The following formulae relate these circuit properties:

$$X_L = 2\pi fL \quad X_C = \frac{1}{2\pi fC} \quad Z = \sqrt{R^2 + (X_L - X_C)^2}$$

X<sub>L</sub> = inductive reactance (ohms)

X<sub>C</sub> = capacitive reactance (ohms)

Z = impedance (ohms)

f = frequency (cycles per second)

C = capacitance (farads)

L = inductance (henrys)

R = resistance (ohms)

$\pi = 3.14$

In circuits where one or more of the properties L, C or R is absent, the impedance formula is simplified as follows:

Resistance only:	Inductance only:	Capacitance only:
$Z = R$	$Z = X_L$	$Z = X_C$

Resistance and Inductance only:	Resistance and Capacitance only:	Inductance and Capacitance only:
$Z = \sqrt{R^2 + X_L^2}$	$Z = \sqrt{R^2 + X_C^2}$	$Z = \sqrt{(X_L - X_C)^2}$

Ohm's Law for AC Circuits:

$$E = I \times Z \quad I = \frac{E}{Z} \quad Z = \frac{E}{I}$$

Capacitances in Parallel:

$$C_t = C_1 + C_2 + C_3 + \dots \text{etc.}$$

C<sub>t</sub> = total capacitance (farads)

C<sub>1</sub>, C<sub>2</sub>, etc. = individual capacitances (farads)

Capacitances in Series:

$$C_t = \frac{1}{\frac{1}{C_1} + \frac{1}{C_2} + \frac{1}{C_3} + \dots \text{etc.}}$$

Inductances in Series and Parallel:

The resulting circuit inductance of several inductances in series or parallel is determined exactly as the sum of resistances in series and parallel as described above.

## PHASE ANGLE

An alternating current through an inductance lags the voltage across the inductance in time by an angle computed as follows:

$$\text{Tangent of angle of lag} = \frac{X_L}{R}$$

An alternating current through a capacitance leads the voltage across the capacitance in time by an angle computed as follows:

$$\text{Tangent of angle of lead} = \frac{X_C}{R}$$

The resultant angle by which a current leads or lags the voltage in an entire circuit is called the phase angle and is computed as follows:

$$\text{Cosine of phase angle} = \frac{R}{Z}$$

## POWER FACTOR

Power factor of a circuit or system is the ratio of actual power (watts) to apparent power (volt-amperes), and is equal to the cosine of the phase angle of the circuit:

$$PF = \frac{\text{actual power}}{\text{apparent power}} = \frac{\text{watts}}{\text{volts} \times \text{amperes}} = \frac{KW}{KVA} = \frac{R}{Z}$$

KW = kilowatts

KVA = kilovolt-amperes = volt-amperes  $\times$  1,000

PF = power factor (expressed as decimal)

## SINGLE PHASE CIRCUITS

$$KVA = \frac{EI}{1,000} = \frac{KW}{PF} \quad KW = KVA \times PF$$

$$I = \frac{P}{E \times PF} \quad E = \frac{P}{I \times PF} \quad PF = \frac{P}{E \times I}$$

$P = E \times I \times PF$

P = power (watts)

## TWO-PHASE CIRCUITS

$$I = \frac{P}{2 \times E \times PF} \quad E = \frac{P}{2 \times I \times PF} \quad PF = \frac{P}{E \times I}$$

$$KVA = \frac{2 \times E \times I}{1,000} = \frac{KW}{PF} \quad KW = KVA \times PF$$

$P = 2 \times E \times I \times PF$

E = phase voltage (volts)

## THREE-PHASE CIRCUITS, BALANCED STAR OR WYE

$$I_N = 0 \quad I = I_p \quad E = \sqrt{3} E_p = 1.73 E_p$$

$$E_p = \frac{E}{\sqrt{3}} = \frac{E}{1.73} = 0.577 E$$

$I_N$  = current in neutral (amperes)

I = line current per phase (amperes)

$I_p$  = current in each phase winding (amperes)

E = voltage, phase to phase (volts)

$E_p$  = voltage, phase to neutral (volts)

## THREE-PHASE CIRCUITS, BALANCED DELTA

$$I = 1.732 \times I_p \quad I_p = \frac{I}{\sqrt{3}} = 0.577 \times I$$

$$E = E_p$$

## POWER: BALANCED 3-WIRE, 3-PHASE CIRCUIT, DELTA OR WYE

For unity power factor (PF = 1.0):

$$P = 1.732 \times E \times I$$

$$I = \frac{P}{\sqrt{3} E} = \frac{0.577 P}{E} \quad E = \frac{P}{\sqrt{3} \times I} = \frac{0.577 P}{I}$$

P = total power (watts)

For any load:

$$P = 1.732 \times E \times I \times PF \quad VA = 1.732 \times E \times I$$

$$E = \frac{P}{PF \times 1.73 \times I} = \frac{0.577 \times P}{PF \times I}$$

$$I = \frac{P}{PF \times 1.73 \times E} = \frac{0.577 \times P}{PF \times E}$$

$$PF = \frac{P}{1.73 \times I \times E} = \frac{0.577 \times P}{I \times E}$$

VA = apparent power (volt-amperes)

P = actual power (watts)

E = line voltage (volts)

I = line current (amperes)

## POWER LOSS: ANY AC OR DC CIRCUIT

$$P = I^2 R \quad I = \sqrt{\frac{P}{R}} \quad R = \frac{P}{I^2}$$

P = power heat loss in circuit (watts)

I = effective current in conductor (amperes)

R = conductor resistance (ohms)

## LOAD CALCULATIONS

### BRANCH CIRCUITS—LIGHTING & APPLIANCE

Two-Wire:

$$I = \frac{\text{total connected load (watts)}}{\text{line voltage (volts)}}$$

I = current load on conductor (amperes)

Three-Wire:

Apply same formula as for two-wire branch circuit, considering each line to neutral separately. Use line-to-neutral voltage; result gives current in line conductors.

Electric Range:

$$\text{2-Wire Circuit: } I = \frac{\text{total connected load (watts)}}{\text{line voltage (volts)}}$$

$$\text{3-Wire Circuit: } I = \frac{\text{total connected load (watts)}}{\text{voltage between outside wires (volts)}}$$

Ampere load on the neutral of a 3-wire circuit may be taken as 70% of that on the outside conductor.

Total connected load, or watt load, is the rated wattage of ranges or other cooking appliances up to 1½ KW. For units rated higher than 1½ KW, the value of watt load is determined from Table 29 of the National Electrical Code.

### DISTRIBUTION PANELS—LIGHTING & APPLIANCE

Two-Wire DC or Single-Phase:

Total connected load (amperes) = sum of branch loads, as determined above. At least 10 amperes should be allowed for each spare or appliance circuit.



**Three-Wire DC or Single-Phase:**

Same calculations apply as for Two-Wire Panel, applied separately to each side of panel.

**Four-Wire, Three-Phase:**

The load on any bus, except the neutral, is computed the same as for a two-wire panel. Usually, the load on each of the four busses is taken as that of the most heavily loaded.

**FEEDERS OR MAINS—LIGHTING & APPLIANCE****Two-Wire DC or Single-Phase:**

Ampere load is equal to the sum of all branch circuit ampere loads supplied by the conductors, adjusted by demand factors in accordance with Sec. 2203 of the National Electrical Code.

**Three-Wire DC or Single-Phase:**

Ampere load on either outside wire is equal to the sum of all branch circuit ampere loads supplied by the conductor, adjusted by demand factors in accordance with Sec. 2203 of the National Electrical Code.

Ampere load on the neutral is equal to the ampere load on the more heavily loaded outside wire, when that current is 200 amps or less. If the load on either of the outside wires is more than 200 amps, the current in the neutral may be taken as 200 plus 70% of the current in excess of 200 amps.

**Four-Wire, Three-Phase:**

Ampere load on any phase conductor is equal to sum of all branch circuit ampere loads supplied by the conductor, adjusted by demand factors in accordance with Sec. 2203 of the National Electrical Code.

Ampere load on the neutral is equal to the ampere load on the most heavily loaded phase conductor, when that current is 200 amps or less. Over 200 amps, load on neutral can be taken as 200 plus 70% of the current in excess of 200 amps.

**Neutral Feeder Load (Sec. 2203g, NEC):**

The load on a feeder neutral conductor shall be taken as the maximum unbalance of the load on the feeder. The maximum unbalance of the load is the maximum connected load between the neutral and any one ungrounded conductor. For a feeder supplying household electric ranges, the maximum unbalanced load shall be considered as 70% of the load on the ungrounded conductors as determined in accordance with Column A of Table 29, Chapter 10, NEC. For 3-wire dc, single-phase ac, or 4-wire, 3-phase ac, a further demand factor of 70% may be applied to that portion of unbalanced load in excess of 200 amperes.

**Minimum-Load Formula for Any Lighting Feeder or Main:**

$$I = \frac{\text{Minimum allowable watts (from Sec. 2203, NEC)}}{K \times E}$$

- K = 1 for two-wire dc or single-phase ac  
 = 1.73 for three-wire, three-phase ac  
 = 2 for three-wire dc or single-phase ac  
 = 3 for four-wire, three-phase ac

E = voltage between outside wire and neutral or, if no neutral exists, between any two line wires (volts)  
 I = current in any line wire except neutral (amperes)

**Residential Service:**

A practical method of computing residential service entrance capacity is provided by Article 220 of the National Electrical Code. However, it is based on safety considerations and may not provide the adequacy and convenience of performance desired.

1. Calculate the lighting load—in watts—by multiplying the square foot of floor area (excluding porches, etc.) by 3 watts/sq. ft.
2. Add 1,500 watts of miscellaneous appliance load.
3. Take 3,000 watts of the total (1 and 2) at 100% demand.
4. Add to this 35% (demand) of the remainder.
5. This total (3 plus 4) is the design lighting and small appliance load.
6. Add 8,000 watts for an electric range (not over 12 kw rating).
7. Add together the rated watts of all fixed appliances.
8. Take 75% (diversity) of the total fixed appliance load and add it to the range, lighting and small appliance loads. This is the total load in watts.
9. Divide this grand total by 240 (for 120/240-volt, 3-wire service) to get the ampere rating.

**MOTOR BRANCH CIRCUITS**

1. For continuous-duty motors, the load on the branch circuit feeding a single motor is taken as 125% of the full-load rated current of the motor.
2. The load on a branch circuit supplying a motor in a class of service having short-time duty depends upon the type of loading. In most cases, the load is not greater than the percentages of full-load rated current given in table of Sec. 4312 of the NEC.
3. The load on conductors connecting the secondary of a wound rotor induction motor to its controller is taken as 125% of the rated full-load secondary current for continuous-duty motors, and not less than the percentages of full load current for short-time duty motors given in table of Sec. 4312 of the NEC. Sec. 4313, NEC, covers load on conductors connecting the controller with secondary resistors.
4. The load on conductors supplying two or more motors is taken as not less than 125% of the full-load current rating of the highest rated motor in the group plus the sum of the full-load current ratings of the remainder of the motors in the group.
5. The load on conductors supplying motors and, in addition, lighting or appliances, is taken as the sum of the separate motor load and lighting or appliance load.

**MOTOR FEEDERS AND MAINS:**

For motor feeders and mains, two values of load—the maximum-demand starting current and the maximum-demand running current—must be determined separately. Although the NEC allows use of the maximum-demand running current in determining size of conductors required to carry the current safely, it is better practice to use the maximum-demand starting current in sizing conductors, since the protection of the circuit can be provided against both straight overloads

and short circuits. The maximum-demand running current is used for determining circuit voltage drop. The maximum-demand starting current is used in determining the proper size of protective equipment for the circuit. Average starting currents of motors are given in Tables 26 and 27 of the NEC. Average full-load rated currents of motors are given in Tables 21, 22, 23 and 24 of the NEC. Maximum-demand starting and running currents for motor feeders and mains are determined as follows:

$$\text{Starting current} = I_s + (DF \times I_r)$$

$$\text{Running current} = (1.25 \times I_r) + (DF \times I_s)$$

where  $I_s$  = starting current of largest motor

$I_r$  = sum of full-load rated currents of all motors except largest

$I_r$  = full-load current of largest motor

DF = demand factor

Notes — Where a number of motors of the same size are the largest in the group, one of these motors should be taken as the largest for solution of the above. Permission for use of a demand factor must be obtained from the authority enforcing the Code.

#### POWER FACTOR OF FEEDERS OR MAINS:

The power factor of a circuit supplying several motors is determined as follows:

1. For each motor, multiply its horsepower by its power factor at 75% of rated load.
2. Add up these products for all of the motors.
3. The sum obtained in "2" divided by the total horsepower connected to the circuit will give the approximate (but accurate enough for most calculations) power factor of the circuit.

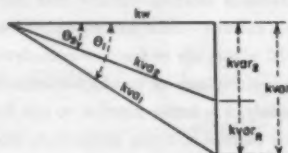
#### POWER FACTOR CAPACITORS

Power factor capacitors can be connected across electric lines to neutralize the effect of lagging power-factor loads, thereby reducing the current drawn for a given kilowatt load. In a distribution system, small capacitor units may be connected at the individual loads or the total capacitor kilovolt-amperes may be grouped at one point and connected to the main. Although the total kvar of capacitors is the same, the use of small capacitors at the individual loads reduces current all the way from the loads back to the source and thereby has greater PF corrective effect than the one big unit on the main, which reduces current only from its point of installation back to the source.

##### Calculating Size of Capacitor:

Assume it is desired to improve the power factor a given amount by the addition of capacitors to the circuit.

Then  $kvar_c = kw \times (\tan \theta_1 - \tan \theta_2)$



where  $kvar_c$  = rating of required capacitor

$kvar_1$  = reactive kilovolt-amperes at original PF

$kvar_2$  = reactive kilovolt-amperes at improved PF

$\theta_1$  = original phase angle

$\theta_2$  = phase angle at improved PF

kw = load at which original PF was determined.

#### VOLTAGE DROP

##### Two-Wire DC Circuits:

$$V = \frac{2k \times L \times I}{d^2} = 2R \times L \times I \quad d^2 = \frac{2k \times I \times L}{V}$$

V = drop in circuit voltage (volts)

R = resistance per foot of conductor (ohms/foot)

I = current in conductor (amperes)

L = one-way length of circuit (feet)

$d^2$  = cross-section area of conductor (circular mils)

k = resistivity of conductor metal (cir. mil-ohms/ft.) (k = 12 for circuits loaded to more than 50% of allowable carrying capacity; k = 11 for circuits loaded less than 50%.)

##### Three-Wire DC Circuits:

$$V = \frac{2k \times L \times I}{d^2} \quad V_n = \frac{V}{2}$$

V = drop between outside conductors (volts)

$V_n$  = drop between one outside conductor and neutral (volts)

I = current in more heavily loaded outside conductor (amperes)

L = one-way length of circuit (feet)

$d^2$  = cross-section area of conductor (circular mils)

k = resistivity of conductor metal (cir. mil-ohms/ft.)

(Use same values of k as in 2-wire circuits above.)

##### Two-Wire, Single-Phase Circuits: (Inductance Negligible)

Same calculations as for two-wire dc circuit.

##### Three-Wire, Single-Phase Circuits: (Inductance Negligible)

Same calculations as for three-wire dc circuits.

##### Three-Wire, Three-Phase Circuits: (Inductance Negligible)

Same calculations as for two-wire dc circuit carrying the same current, multiplied by 0.866.

$$V = \frac{2k \times I \times L}{d^2} \times 0.866$$

V = voltage drop of three-phase circuit

##### Four-Wire, Three-Phase Balanced Circuits:

(Inductance Negligible)

For lighting loads: Voltage drop between one outside conductor and neutral equals one-half of drop calculated by formula for two-wire dc circuits.

For motor loads: Voltage drop between any two outside conductors equals 0.866 times drop determined by formula for two-wire dc circuits.

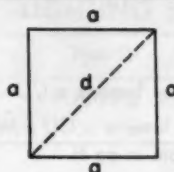


**MATHEMATICS**

**Square:**

$$\text{Area} = a^2$$

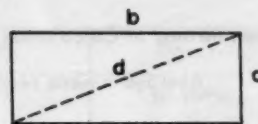
$$d = a\sqrt{2}$$



**Rectangle:**

$$\text{Area} = a \times b$$

$$d = \sqrt{a^2 + b^2}$$



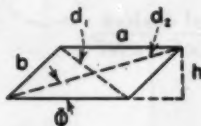
**Parallelogram:**

(opposite sides parallel)

$$\text{Area} = ah = ab \sin \phi$$

$$d_1 = \sqrt{a^2 + b^2 - 2ab \cos \phi}$$

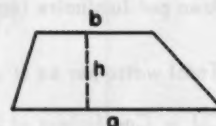
$$d_2 = \sqrt{a^2 + b^2 + 2ab \cos \phi}$$



**Trapezoid:**

(1 pair of opposite sides parallel)

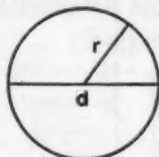
$$\text{Area} = \frac{1}{2}h(a + b)$$



**Circle:**

$$\text{Circumference} = \pi d = 2\pi r$$

$$\text{Area} = \pi r^2 = \frac{1}{2}\pi d^2 = \frac{1}{2}r \times \text{Circumference}$$

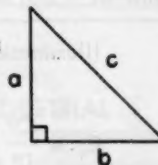


**Right Triangle:**

$$\text{Area} = \frac{1}{2}ab$$

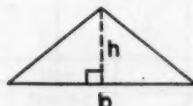
$$c = \sqrt{a^2 + b^2}$$

$$a = \sqrt{c^2 - b^2} \quad b = \sqrt{c^2 - a^2}$$



**Oblique Triangle:**

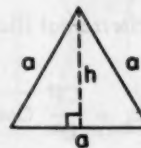
$$\text{Area} = \frac{1}{2}bh$$



**Equilateral Triangle:**

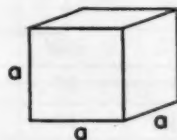
$$\text{Area} = \frac{1}{2}ah = \frac{\sqrt{3}}{4}a^2$$

$$h = \frac{\sqrt{3}}{2}a$$



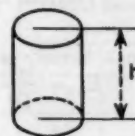
**Cube:**

$$\text{Volume} = a^3$$



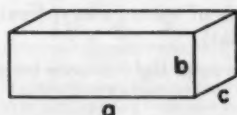
**Cylinder:**

$$\text{Volume} = \text{area of base} \times h$$



**Rectangular Cubicle:**

$$\text{Volume} = a \times b \times c$$



**Functions of an Angle:**

$$\sin(\sin) \phi = \frac{y}{r}$$

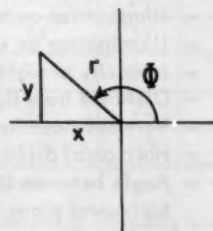
$$\cosine(\cos) \phi = \frac{x}{r}$$

$$\text{tangent}(\tan) \phi = \frac{y}{x}$$

$$\text{cotangent}(\cot) \phi = \frac{x}{y}$$

$$\text{secant}(\sec) \phi = \frac{r}{x}$$

$$\text{cosecant}(\csc) \phi = \frac{r}{y}$$



# FORMULAS FOR GENERAL LIGHTING DESIGN

## Lumen Method of Calculation

$$\text{Average lumens reaching work plane} = \text{total initial lamp lumens} \times \text{CU} \times \text{MF}$$

$$\begin{aligned} \text{Average footcandles at work plane} &= \frac{\text{total initial lamp lumens} \times \text{CU} \times \text{MF}}{\text{area of room in sq ft}} \\ &= \text{total watts per sq ft} \times \text{overall lumens per watt} \times \text{CU} \times \text{MF} \end{aligned}$$

$$\text{Area per lamp (sq ft)} = \frac{\text{initial lumens per lamp} \times \text{CU} \times \text{MF}}{\text{average footcandle level desired}}$$

$$\text{Area per luminaire (sq ft)} = \frac{\text{initial lumens per lamp} \times \text{no. of lamps per luminaire} \times \text{CU} \times \text{MF}}{\text{average footcandle level desired}}$$

$$\text{Total watts per sq ft} = \frac{\text{average footcandle level desired}}{\text{overall lumens per watt} \times \text{CU} \times \text{MF}}$$

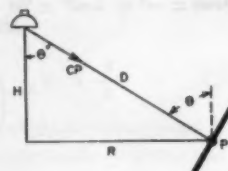
CU = Coefficient of Utilization

MF = Maintenance Factor

## Point-by-Point Method of Calculation

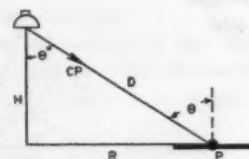
Illumination Normal to Light Ray:

$$E_n = \frac{CP}{D^2}$$



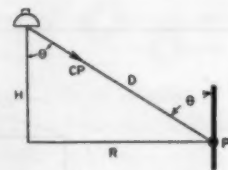
Horizontal Illumination:

$$E_h = \frac{CP}{D^2} \cos \theta = \frac{CP}{H^2} \cos^3 \theta = \frac{CP \times H}{D^3}$$



Vertical Illumination:

$$E_v = \frac{CP}{D^2} \sin \theta = \frac{CP}{H^2} \cos^2 \theta \sin \theta = \frac{CP \times R}{D^3}$$



$E_n$  = Illumination on plane normal to light ray (footcandles)

$E_h$  = Illumination on horizontal plane when light ray hits plane at angle  $\theta$  (footcandles)

$E_v$  = Illumination on vertical plane when light ray hits plane at angle  $\theta$  (footcandles)

CP = Intensity of light source in direction of point P (candlepower)








D = Distance from light source to point P (feet)

H = Vertical mounting height of light source above plane of measurement (feet)

R = Horizontal distance from light source to point P (feet)

$\theta$  = Angle between light ray and a perpendicular line through light source (or a line perpendicular to horizontal plane through point P)







### LIGHTING SYSTEM CLASSIFICATIONS

<div>UP</div>  <div>DOWN</div> 	Type D	Type SD	Type G	Type SI	Type I
	0-10%	10-40%	40-60%	60-90%	90-100%
					
	90-100%	60-90%	40-60%	10-40%	0-10%
	Direct	Semi-Direct	General Diffuse	Semi-Indirect	Indirect

### LUMINAIRE MOUNTING AND SPACING

#### COMMERCIAL

#### INDUSTRIAL

	Direct		Semi-Direct		Semi-Indirect		Indirect		Spread		Concentrating	
Mounting Height of Luminaire												
	D		SD		SI		I					
Ceiling Height for Indirect and Semi-Indirect Luminaires												
Dimensions in Feet	Usual Spacing Between Units	Max. Spacing Between Units	Spacing* from Walls	Spacing Between Units	Spacing* from Walls	Length of Suspension	Maximum Spacing <sup>1</sup> (ft.)					
8	7	7½	3	9	3	1-3	Mounting Heights Above Floor	Spacing Between Units <sup>2</sup>				
9	8	8	3	9½	3	1½-3		Spread	Concen <sup>t</sup> .			
10	9	9	3½	10½	3½	2-3	15	12	—			
11	10	10½	3½	12	3½		16	12	—			
12	10-12	12	4	14	4	2½-4	18	18	—			
13	10-12	13	4	15	4		3-4	20	20	—		
14	10-13	15	5	17	5			22	20	—		
15	10-13	17	5	19	5	4-5	24	23	16			
16	10-13	19	6	21	6		26	25	17			
18	10-20	21	6	23	6		28	30	18			
20 or more	18-24	24	7	26	7	4-6	30 or more	30	20			

\*Spacings apply where desks or benches are next to wall, otherwise one-half the spacing between units is satisfactory.

<sup>1</sup>Units may have to be spaced closer to obtain desired illumination values.

<sup>2</sup>Where benches or machines are next to wall, spacing from wall should not exceed ½ spacing between units. Otherwise ½ unit spacing is suitable.

### ROOM RATIO - ROOM INDEX CONVERSION

Average Room Ratio	Range of Room Ratios	Room Index
5.0	4.5 up	A
4.0	3.5 to 4.5	B
3.0	2.75 to 3.5	C
2.5	2.25 to 2.75	D
2.0	1.75 to 2.25	E
1.5	1.38 to 1.75	F
1.25	1.12 to 1.38	G
1.00	0.9 to 1.12	H
0.8	0.7 to 0.9	I
0.6	Less than 0.7	J

### ROOM RATIO FORMULAS

**Direct, Semi-Direct and General Diffuse Lighting:**

$$\text{Room Ratio} = \frac{W \times L}{\text{Mounting height above work plane} \times (W+L)}$$

**Semi-Indirect and Indirect Lighting:**

$$\text{Room Ratio} = \frac{3 \times W \times L}{2 \times \text{ceiling height above work plane} \times (W+L)}$$

W=width of room

L=length of room

### HOW TO SELECT LUMINAIRES

#### Type of Light Source

Consider lumens per watt, size of lamps, color quality of light produced by the lamps, lamp life and replacement cost.

#### Type of Light Distribution

The type of lighting system and equipment layout selected will control the type of light distribution required for the luminaires or reflector equipment.

#### Initial Lumens Required

Light loss factors, spacing of outlets, and the desired lighting intensity maintained in service will establish light output in lumens required for each luminaire.

#### Overall Efficiency

Overall efficiency of luminaires varies from a high of approximately 90% downward. Consult manufacturers' light output and photometric data for luminaires under consideration.

#### Quality of Materials

Reflectors should have permanent type reflecting surface. Diffusing media should be durable, highly translucent, and should present an evenly lighted appearance. Gauge of metals should be adequate for necessary rigidity. Proper ventilation is important.

#### Ease of Maintenance

Luminaires should be easy to clean and relamp, with easily removable louvers, panels, etc. Ballasts should be readily accessible.

#### Appearance

Luminaires should present a good appearance and harmonize with interior and architectural treatment where used. Plain, simple lines are usually preferred.

#### Cost

Equipment cost is only part of the cost of good lighting. High first cost of equipment in a well designed lighting system may readily provide low cost lighting. Consider operating and maintenance costs; then select a low-cost "system".



**ROOM INDEXES**

Room Width (feet)	Room Length (feet)	DIRECT, SEMI-DIRECT AND GENERAL DIFFUSING LIGHTING Mounting Height above Floor (feet)							
		8	9	10	12	15	19	27	43
10	10	H	I	J	J				
	14	H	H	I	J	J			
	18	G	H	I	J	J			
	24	G	G	H	I	J			
	30	F	G	H	I	J	J		
12	12	G	H	I	J	J			
	16	G	H	I	I	J			
	20	F	G	H	I	J	J		
	24	F	F	G	H	J	J		
	30	F	F	G	H	I	J	J	
14	14	F	G	H	I	J			
	18	F	G	H	I	J	J		
	24	F	F	G	H	J	J		
	30	E	F	G	H	I	J		
	40	E	F	G	H	I	J	J	
16	16	F	G	G	I	J	J		
	20	F	F	G	H	I	J		
	30	E	F	F	H	I	J		
	40	E	F	F	G	I	J	J	
20	20	E	F	F	H	I	J		
	30	D	E	F	G	H	J	J	
	40	D	E	E	F	H	I	J	
	60	D	D	E	F	G	I	J	
24	24	D	E	F	G	H	I	J	
	30	D	E	E	F	H	I	J	
	40	C	D	E	F	G	I	J	
	60	C	D	D	E	F	H	J	
	80	C	D	D	E	F	G	J	J
30	30	C	D	E	F	G	H	J	
	40	C	D	D	E	F	H	I	
	60	C	C	D	E	F	G	I	J
	80	C	C	C	E	F	G	I	J
40	40	B	C	C	E	F	G	I	J
	60	B	B	C	D	E	F	H	J
	80	B	B	C	D	E	F	H	J
	100	B	B	C	C	E	F	G	J
60	60	A	A	B	C	D	E	G	I
	80	A	A	A	B	D	E	F	I
	100	A	A	A	B	C	E	F	I
	120	A	A	A	B	C	D	F	H
80	80	A	A	A	B	C	D	F	H
	140	A	A	A	A	B	C	E	G
	200	A	A	A	A	B	C	E	F
100	100	A	A	A	A	B	C	E	G
	150	A	A	A	A	B	C	D	F
	200	A	A	A	A	B	C	D	F
120	120	A	A	A	A	A	B	D	F
	160	A	A	A	A	A	B	D	F
	200	A	A	A	A	A	B	C	F
Room Width (feet)	Room Length (feet)	10½	12	13½	16½	21	27	39	63
SEMI-INDIRECT AND INDIRECT LIGHTING Ceiling Height above Floor (feet)									

NOTE: For more complete table, see Table 9-1, *IES Lighting Handbook*, 2nd Edition.



**Coefficients of Utilization for Typical Lighting Systems**

CU values given are average for only three room indexes: B (room ratio 3.0 up); E (room ratio 1.25 to 3.0); and H (room ratio 1.25 and less). Interpolate for intermediate values, or see manufacturers' complete CU data for specific luminaires when greater accuracy is required.

Type of Lighting	Ceiling RF*	75%	50%	Type of Lighting	Ceiling RF	75%	50%
	Wall RF	50%	30%		Wall RF	50%	30%
Type D Luminaires; fluorescent, louver-shielded, direct-lighting	B E H	0.53 0.46 0.38	0.50 0.44 0.36	Industrial Reflectors; medium bay, for incandescent or mercury vapor lamps	B E H	0.63 0.55 0.45	0.60 0.51 0.41
Type SD Luminaires; fluorescent, semi-direct lighting with louvered bottom and plastic sides	B E H	0.53 0.44 0.34	0.45 0.38 0.29	Industrial Luminaires; fluorescent, 2-lamp, open- or closed-end, without louvers	B E H	0.72 0.62 0.50	0.68 0.58 0.46
Type G Luminaires; fluorescent, general diffuse lighting with open top, plastic sides and louvered bottom	B E H	0.57 0.48 0.38	0.46 0.39 0.30	Recessed Reflector Lamps; 150-watt R40 flood, with 15° shielding. (CU varies greatly with degree and type of shielding.)	B E H	0.51 0.48 0.41	0.49 0.45 0.38
Type SI Luminaires; fluorescent, semi-indirect lighting, with plastic reflector trough	B E H	0.46 0.35 0.25	0.28 0.20 0.14	Cove Lighting; average conditions and good relationship of cove to ceiling. Increase values for good conditions; decrease for poor conditions.	B E H	0.34 0.27 0.17	0.21 0.15 0.09
Type I Luminaires; fluorescent or incandescent, with mat ceiling finish	B E H	0.43 0.33 0.23	0.28 0.22 0.15	Coffer Lighting; good white reflecting surface with mat finish in coffer	B E H	0.23 0.19 0.12	0.16 0.12 0.07

Type of Lighting	Ceiling RF	75%	75%	Type of Lighting	Ceiling RF	75%	50%
	Wall RF	50%	30%		Wall RF	50%	30%
Luminous Ceiling Light- ing; cavity reflectance 75%; cavity efficiency 60%; apparent ceiling reflectance 60%; floor reflectance 14% (Table 9-2. IES Lighting Hand- book, 2nd Edition)	B	0.55	0.52	Fluorescent Troffer Lighting; low values represent recessed troffers equipped with diffusing glass covers; high values represent open single-lamp troffers	Room Index	Approx. Range	
	E	0.46	0.42		A	0.51 to 0.68	0.48 to 0.64
	H	0.33	0.28		B	0.50 to 0.67	0.47 to 0.62
					C	0.49 to 0.66	0.46 to 0.61
Louverall Ceiling Light- ing; shallow cavity with 75% reflectance, without reflectors	Using 45° Plastic Louvers				D	0.47 to 0.65	0.45 to 0.59
	B	0.47	0.44		E	0.44 to 0.60	0.42 to 0.57
	E	0.41	0.38		F	0.42 to 0.58	0.38 to 0.53
	H	0.32	0.28		G	0.39 to 0.55	0.37 to 0.51
	Using 45° White Metal Louvers				H	0.37 to 0.52	0.34 to 0.48
	B	0.41	0.38		I	0.34 to 0.48	0.30 to 0.44
	E	0.36	0.33		J	0.28 to 0.40	0.24 to 0.37
	H	0.29	0.26				

\*RF = Reflectance Factor

**LAMP SPECIFICATIONS**

STANDARD FLUORESCENT LAMPS						
Lamp Designation	Nominal Length (Inches)	Ave. Lamp Amps.	Standard Cool White		Standard Warm White and White	
			Lumens	L/W	Lumens	L/W
General Line Lamps*						
F4T5	6	0.125	100	25.0	105	26.2
F6T5	9	0.145	210	34.4	220	36.1
F8T5	12	0.16	320	40.5	330	41.8
F13T5	21	0.16	680	52.3	700	53.8
F14T12	15	0.39	540	38.4	570	40.7
F15T8	18	0.30	730	48.6	760	50.6
F15T12	18	0.33	615	43.6	640	45.4
F20T12	24	0.37	980	51.0	1000	52.1
F25T12	33	0.52	1470	60.0	1530	63.4
F30T8	36	0.355	1840	61.4	1900	62.0
F40T12	48	0.43	2500	64.1	2600	66.6
F90T17	60	1.57	5150	57.8	5300	59.5
Rapid Start Lamps**						
F40T12/RS	48	0.43	2500	64.1	2600	66.6
F96T12/RS	96	0.800	6800	61.8	—	—
Instant Start Lamps***						
F40T/IS	48	0.43	2500	64.1	2600	66.6
F40T17/IS	60	0.425	2400	58.5	2500	61.0

Source: General Electric Co., Lamp Department.

NOTE—Data in this Table are condensed, giving pertinent information for lighting application design only. For more complete data, see lamp manufacturers' fluorescent lamp catalogs and bulletins.

\* For operation in pre-heat ballast circuits.

\*\* Designed for use in Rapid Start circuits.

\*\*\* Should only be operated from instant-start ballast.

CIRCLINE FLUORESCENT LAMPS					
Lamp Designation	Lamp Size Dia. (In.)	Nominal Lamp Watts	Ave. Lamp Amps	Lumens	
				Cool White	Warm White
FC8T9	8 1/4	22	0.390	930	—
FC12T10	12	32	0.435	1550	1600
FC16T10/RS*	16	40	0.420	2200	—

\*Designed for Rapid Start operation.  
 For more detailed information, see mfrs' catalogs.

CUSTOM COLD CATHODE FLUORESCENT LAMPS				
Lamp Diameter (mm)	Lamp Current (ma)	Lumens Per Foot*	Watts Per Linear Foot	
			LP Lamps	HP Lamps
15 (T-5)	30	140	3.0	3.3
	60	240	5.1	5.6
	100	380	8.2	8.9
20 (T-6½)	60	220	4.5	4.9
	100	330	6.4	7.0
	120	390	7.2	7.8
	150	470	9.6	10.5
25 (T-8)	60	170	3.2	3.4
	100	270	4.6	5.1
	120	310	5.2	5.7
	150	380	6.9	7.5
	200	500	9.2	10.0

Source: Fluorescent Lighting Association Handbook.  
 Cold Cathode lamps can be custom made to meet a wide range of special lighting conditions, including special lengths and curved sections.  
 \*Lumen values are for warm white lamps.

SLIMLINE FLUORESCENT LAMPS					
Lamp Designation	Ave. Lamp Watts*	Standard Cool White		Standard Warm White and White	
		Lumens	L/W*	Lumens	L/W*
Operated at 120 ma Lamp Current					
F42T6	17.5	1030	59.8	1100	62.9
F64T6	25.5	1640	64.3	1710	67.1
F72T8	24.5	1720	70.2	1790	73.0
F96T8	32.0	2350	73.3	2450	76.4
Operated at 200 ma Lamp Current					
F42T6	25.0	1480	59.2	1570	62.8
F64T6	37.0	2350	63.5	2450	66.2
F72T8	36.5	2550	69.8	2650	72.5
F96T8	49.0	3500	71.4	3600	73.5
Operated at 300 ma Lamp Current					
F42T6	32.5	1790	55.1	1900	58.4
F64T6	48.0	2850	59.4	2950	61.5
F72T8	48.5	3300	68.0	3400	70.0
F96T8	65.0	4550	70.0	4650	71.5
Operated at 425 ma Lamp Current					
F48T12	38.0	2300	60.5	2400	63.1
F72T12	55.0	3600	65.4	3700	67.2
F96T12	74.0	5000	67.6	5150	69.6

Source: General Electric Co., Lamp Department

NOTE--Data in this Table are condensed, giving pertinent information for lighting application design only. For more complete data, see manufacturers' fluorescent lamp catalogs and bulletins

\*Lamp Wattage only, and lamp lumens per watt. For overall wattage, add ballast watts loss.

STANDARD COLD CATHODE FLUORESCENT LAMPS						
Lamp Designation	Nominal Length (in.)	Lamp Wattage*	Initial Lumens*			
			Warm White	L/W* 4500° White	L/W*	
20 mm Lamps Operated at 120 ma**						
2045	48	31	1250	40.5	1150	37.1
2052	55	32	1600	50.0	1450	45.3
2064	67	35	1450	41.4	1350	38.5
2069	72	37	1550	41.9	1450	39.2
2072	75	38	1600	42.1	1500	39.5
2084	87	42	2250	53.5	2150	51.2
2093	96	45	2500	55.5	2400	53.3
25 mm Lamps Operated at 120 ma**						
2545	48	26	1100	42.3	1000	38.5
2552	55	29	1250	43.1	1150	39.7
2564	67	31	1350	43.6	1250	40.2
2569	72	34	1700	50.0	1600	47.0
2572	75	36	1800	50.0	1700	47.2
2584	87	40	2150	53.7	2050	51.2
2593	96	42	2300	54.8	2200	52.4

Source: Fluorescent Lighting Association Handbook.

\* Wattage and lumens per watt for lamp only. Add watts loss in transformers for total watts and overall efficiency.

\*\* Low pressure (LP) lamps. High pressure lamps (HP) also available. See FLA Handbook for data on operation at other lamp currents and for other colors.

## LAMP SPECIFICATIONS

RATED AVERAGE LIFE OF FLUORESCENT LAMPS				
Type Lamps	Burning Hours Per Start			
	3	6	12	Continuous*
Starter-Operated (15-, 20-, 25-, 30-, 32-, 40-, 90-, and 100-watt)	7500	Plus 25%	Plus 60%	Plus 250%
Rapid Start	7500			
All T-12 Slimline	7500			
T-6 and T-8 Slimline	6000			
Cold Cathode LP Cold Cathode HP	15000 25000	Life not affected by number of starts		

\*Light output depreciates steadily as lamps are burned. Where infrequent starting or continuous burning is involved, lamps should be replaced before they reach average life for greatest lighting value.

FLUORESCENT LAMP LUMEN OUTPUT RATIOS (Standard Cool White = 1.00)	
Color of Lamp	Multiplying Factor
Deluxe Cool White	0.71
Deluxe Warm White	0.71
Daylight	0.93
Soft White	0.68
Green	1.20
Gold	0.60
Blue or Pink	0.45
Red	0.06

STANDARD MERCURY VAPOR LAMPS					
Lamp Designation	Approx. Watts*	Bulb	Light Center Length (in.)	Approx. Lumens	L/W*
H250-A5	250	T-18	5 in	11,000	44.0
H400-A1	400	T-16	7 3/4	15,000	37.5
H400-E1	400	BT-37	7	20,000	50.0
H400-E1T	400	T-20	7	20,000	50.0
H400-J1	400	BT-37	7	17,000	42.5
H400-R1	400	R-52	---	14,500	36.3
H400-RC1**	400	R-52	---	17,500	43.7
H700-A18	700	BT-46	9 1/2	35,000	50.0
H700-B18**	700	BT-46	9 1/2	33,000	47.2
H1000-A12	1000	BT-56	9 3/8	--	--
H1000-A15	1000	BT-56	9 3/8	52,000	52.0
H1000-C15**	1000	BT-56	9 3/8	46,000	46.0
H3000-A9	3kw	T-9 1/2		132,000	44.0

\*Lamp only; does not include transformer watts loss.

\*\*Color improved with fluorescent phosphors.

Use this table for general information only. Consult manufacturers' published data for more detailed information.

STANDARD INCANDESCENT LAMPS					
Watts	Bulb	Initial Lumens	Initial L/W	Rated Life (Hours)	Light Center Length
25	A-19	265	10.6	1000	2 1/2
40	A-19	465	11.6	1000	2 7/8
60	A-19	835	13.9	1000	3 1/8
75	A-19	1150	15.3	750	3 1/8
100	A-21	1630	16.3	750	3 7/8
150	A-23	2650	17.7	750	4 5/8
200	PS-30	3700	18.5	750	6
300	PS-35	5650	18.8	1000	7
500	PS-40	9900	19.8	1000	7
750	PS-52	15600	20.8	1000	9 1/2
1000	PS-52	21500	21.5	1000	9 1/2
1500	PS-52	33000	22.0	1000	9 1/2
500	T-20*	9300	18.6	1000	4
750	T-24*	14000	18.7	1000	5 1/2
1000	T-24*	19500	19.5	1000	5 1/2

\*Special heat-resistant glass bulb, inside frost, with medium bipost base for base up burning.

NOTE--For complete listing, see lamp manufacturers' catalogs. All lamps listed above are inside frost type general service lamps.



**LAMP SPECIFICATIONS**

INCANDESCENT PROJECTOR AND REFLECTOR LAMPS					
Bulb Type	Watts	Beam Spread (Degree)*	Beam Lumens*	Candlepower (10° Cone)**	Chart No.
Spot Beam Type					
R-30	75	50	350	1,800	A E C G -
PAR-38	150	30	1100	10,500	
R-40	150	40	810	6,000	
R-40	300	35	1600	13,500	
R-40	500	35	2600	22,000	
Flood Beam Type					
R-30	75	130	610	430	B F D H -
PAR-38	150	60	1350	3,500	
R-40	150	110	1500	1,250	
R-40	300	115	2900	2,400	
R-40	500	115	4600	3,800	
Narrow Beam Type					
PAR-46	200	17x23	1200	30,000***	-
PAR-56	300	15x20	1800	65,000***	-
PAR-56	300	20x35	1800	20,000	-

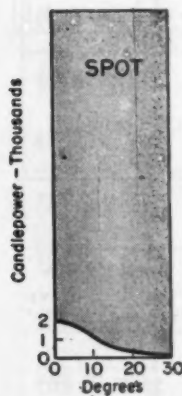
Source: G. E. Lamp Dept. Bulletin LS-152

NOTE--See lamp mfgs.' catalogs for more detailed data.

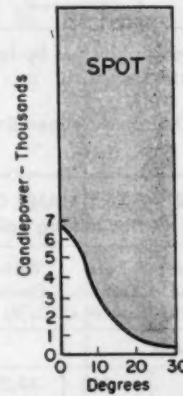
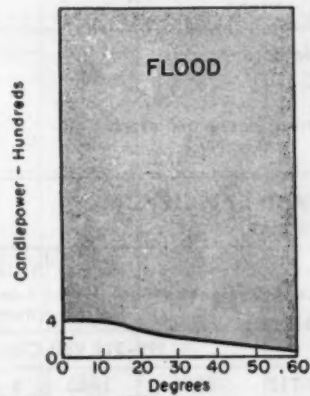
\* Measured to 10° of maximum candlepower

\*\* Average initial CP in 10° cone

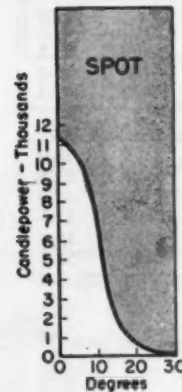
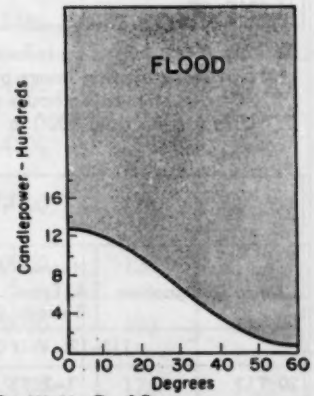
\*\*\* Values per central 5° cone



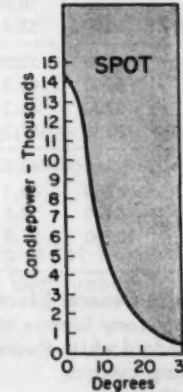
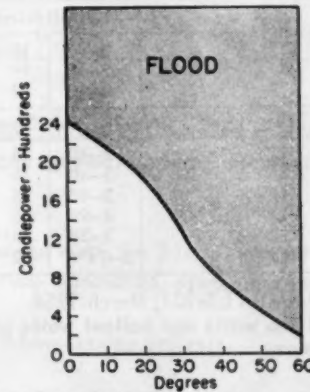
75 - Watt R-30



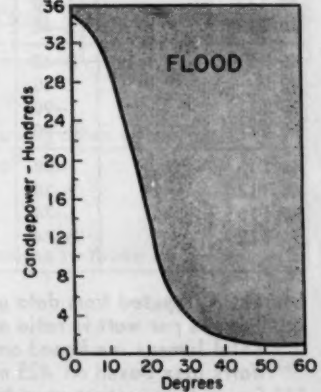
150 - Watt R-40



150 - Watt PAR-38



300 - Watt R-40





### LAMP SPECIFICATIONS

<b>AVERAGE LIGHT OUTPUT AND OPERATING LIFE</b>				
Based on burnouts per billion lumen hours				
Lamp Designation	Rated Life (Hours)	Initial Output (Lumens)	Average Output (Lumens)	Average Lamp Burnouts per Billion Lumen Hours
				100 200 300 400
<b>Filament Lamps</b>				
200-W PS-30	750	3700	3330	----- 400
300-W PS-35	1000	5650	5085	----- 197
500-W PS-40	1000	9850	8965	----- 113
1000-W PS-52	1000	21500	19350	----- 52
<b>Fluorescent Lamps</b>				
40 T12 white	7500	2600	2210	----- 60
40 T12 daylight	7500	2300	1955	----- 68
90 T17 white	7500	5300	4505	----- 30
90 T17 daylight	7500	4800	4080	----- 33
40 T12 RS white	7500	2600	2210	----- 60
96 T12 RS white	7500	6800	5780	----- 23
48 T12 white slimline	7500	2400	2040	----- 65
96 T12 white slimline	7500	5100	4335	----- 31
<b>Mercury Vapor Lamps</b>				
H 400-J1	6000*	17600	15600	----- 10.7
H 1000-A15	4000**	52000	46300	----- 5.4
H 3000-A9	7500***	132000	117500	----- 1.1

Source: Data based on information published by lamp manufacturers.

\* 5 or more burning hours per start.

\*\* 10 or more burning hours per start.

\*\*\* Life ranges from 5000 to 10,000 hours depending on burning hours per start.

<b>FLUORESCENT LAMP OUTPUT AND EFFICIENCY</b>				
After adding ballast watts loss				
Lamp Designation	Number & Type Ballast	Ballast Loss (Watts)	Total Output (Lumens)	Efficiency (L/W) *
<b>110-125 Volt Circuits</b>				
20 T12	1-20	5	980	39.2
20 T12	2-20	9	1960	40.0
40 T12	1-40	11	2550	50.0
40 T12	2-40	15.5	5100	53.4
40 RS	2-40	17	5100	52.5
40 IS	2-40	28	5000	46.3
90 T17	1-90	25	5200	45.2
90 T17	2-90	38	10400	47.7
48 T12	1-38	20**	2350	40.6
48 T12	2-38	28**	4700	45.1
96 T12	1-74	27**	5100	50.5
96 T12	2-74	45**	10200	52.9
<b>199-216 Volt Circuits</b>				
40 T12	1-40	8	2550	53.2
40 RS	2-40	19	5100	51.5
<b>220-250 Volt Circuits</b>				
40 T12	2-40	18.5	5100	51.8
40 RS	2-40	19	5100	51.5
90 T17	2-90	32	10400	49.1
<b>240-280 Volt Circuits</b>				
40 T12	2-40	18	5100	52.1
40 RS	2-40	19	5100	51.5
90 T17	2-90	35	10400	48.4
90 T17	4-90	36	20800	52.5
48 T12	2-38	28**	4700	45.1
96 T12	2-74***	32**	10200	56.7

Source: Computed from data given in General Electric Co. Bulletin LS-101, March 1954.

\* Lumens per watt is ratio of total lamp lumens to sum of lamp watts and ballast watts loss.

Total lumens are based on standard white fluorescent lamps.

\*\* Watts loss based on 425 ma lamp current.

\*\*\* Series type instant start ballast.

**LOAD AND LIGHT OUTPUT OF TYPICAL FLUORESCENT LUMINAIRES\***

Fluorescent Lamps				1-Lamp Luminaire			2-Lamp Luminaire**		
Type Lamp	Length Inches	Lamp Watts	Lamp Current (ma)	Lumens	Total Watts	L/W	Lumens	Total Watts	L/W
40T12	48	39	430	2450	48	51.0	4900	94	52.1
40T12/RS	48	39	430	2450	51	48.0	4900	95	51.5
40T17/IS	60	41	425	2400	61	39.4	4800	104*	46.2
90T17	60	89	1570	4950	114	43.4	9900	216	45.9
72T8	72	25	120	1720	36	48.8	3440	69	49.9
72T8	72	37	200	2550	53	48.2	5100	98	52.1
72T8	72	49	300	3300	70	47.2	6600	134	49.2
92T8	96	32	120	2350	43	54.6	4700	85	55.3
96T8	96	49	200	3500	69	50.7	7000	130	53.9
96T8	96	65	300	4550	90	50.5	9100	176	51.6
48T12	48	38	425	2250	58	38.8	4500	104	43.2
48T12	48	38	425	--	--	--	4500	98*	45.9
72T12	72	55	425	3550	80	44.4	7100	143	49.7
72T12	72	55	425	--	--	--	7100	138*	51.4
96T12	96	74	425	4950	101	49.0	9900	193	51.3
96T12	96	74	425	--	--	--	9900	176*	56.3
96T12/RS	96	110	800	--	--	--	13600	623	51.7

\*Using HPF lead-lag ballast and standard cool white lamps. For lumen output using other color lamps, use the multiplying factors given in table. "Fluorescent Lamp Lumen Output Ratios".

\*\*For total lumens and watts for 3-lamp luminaires, add values of 1-lamp luminaires to those for 2-lamp luminaires. For 4-lamp luminaires, double the values of 2-lamp luminaires.

\*Based on use of 2-lamp series ballasts.

Source: Computed from data in General Electric Co. Bulletin LA-101, March 54.

**EQUIPMENT DESIGN DATA**

**DATA ON TYPICAL FLUORESCENT BALLASTS**  
Used for General Lighting

Number and Type Lamp	Weight (lbs)	Line Current (amps)	Power Consumed (Watts)	
			Ballast	Per Lamp*
For 60-cycle, 110-125 Volt Circuits				
2 - 20	3¼	.42	9	24.5
2 - 30	6¼	.70	18	39.0
2 - 40	6¼	.85	15.5	47.8
2 - 40 RS	5½	.85	17	48.5
2 - 40 IS	11	.98	28	54.0
2 - 48 T12	11	.98	28	52.0
2 - 72 T12	15	1.40	33	71.5
2 - 96 T12	18	1.75	45	96.5
For 60-Cycle, 199-216 Volt Circuits				
2 - 40 RS	6¼	.49	19	49.5
For 60-cycle, 220-250 Volt Circuits				
2 - 40	6½	.45	18.5	49.2
2 - 90 T17	15	1.10	32	106.0
2 - 40 RS	6¼	.43	19	49.5
For 60-cycle, 240-280 Volt Circuits				
2 - 40	6½	.37	18	49.0
2 - 40 RS	6¼	.40	19	49.5
2 - 48 T12	16¼	.43	28	52.0
2 - 96 T12	13**	.72	32	90.0
2 - 90 T17	16¼	1.00	35	107.5
4 - 90 T17	17½	1.65	36	99.0

Source: General Electric Co. Bulletin LS-101, March, 1954.

\* Lamp wattage plus loss in ballast.

\*\* Series type ballast.

**MAJOR CAUSES OF LIGHT LOSS**  
In Lighting Systems

Cause of Depreciation	Percent Loss
Lamp Depreciation (End of rated life)	
Incandescent	20
Fluorescent	30
Mercury Vapor	23
Circuit Voltage Depreciation	
With adequate wiring	Negligible
With poor wiring and overloading of circuits	5-20
Luminaire Light Absorption	18-35
Paint Depreciation	
Absorption of light by walls, ceilings, floors and other surfaces	5 (per year)
Dirt and Dust Depreciation	
1-month cleaning intervals	10
3-month cleaning intervals	15
6-month cleaning intervals	20
Cleaned when lamps burn out	30
Lamp Outage Depreciation	Up to 12

**COMPARATIVE STROBOSCOPIC EFFECT**  
OF VARIOUS LIGHT SOURCES  
Operated on 60-Cycle Supply

Lamp Type	Method of Operation	Relative Stroboscopic Effect
Incandescent		
200-watt		1
40-watt		7
Fluorescent		
Green	Single-lamp ballast	11
Blue	Single-lamp ballast	49
White	Single-lamp ballast	19
White	2-lamp ballast	9
White	Single-lamp ballast on each phase of 3-phase circuit (3 lamps)	3
White	3 lamps: 1 on single-lamp ballast, 2 on 2-lamp ballast	14

Source: IES Lighting Handbook

**LIGHT SOURCE EFFICIENCIES**

Source	Approx. Lumens per Watt
Candle (Luminous Efficiency Equivalent)	0.1
Oil Lamp (Luminous Efficiency Equivalent)	0.3
Original Incandescent Lamp (1879)	1.4
60-Watt Carbon Filament Lamp (1905)	4.0
60-Watt Coiled Coil Tungsten Filament Lamp (1954)	13.9
1000-Watt General Service Lamp (1954)	21.8
No. 1 Photoflood Lamp (1954)	34.6
1000-Watt A-H12 Mercury Vapor Lamp (Lamp Only-1954)	55.0
40-Watt White Fluorescent Lamp (Lamp Only-1954)	64.0

Source: Westinghouse Lighting Handbook (1954)

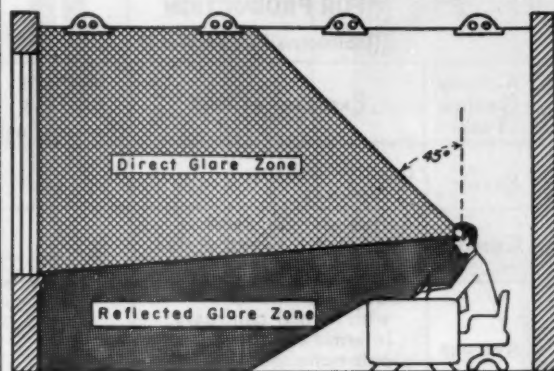
**TYPES OF MAINTENANCE EQUIPMENT**  
Used for Lighting Servicing

Equipment	Mounting Height (Feet)			
	To 12	12-18	18-30	Over 30
Catwalk (Or Truss)			x	x
Crane (Where Available)			x	x
Crows-Nest Ladder			x	
Disconnecting Hanger		x	x	x
Portable Maintenance Platform		x	x	
Relamping Bridge			x	x
Step Ladder	x			
Straight Ladder		x		
Telescoping Platform Tower		x	x	



## DESIGN CONSIDERATIONS

### FACTORS AFFECTING THE LUMINOUS ENVIRONMENT



- Luminous environment is the resulting visual effect in a lighted space.
- It involves size, shape, and brilliance of the light source; direction and diffusion of the light rays; color, texture and finish of walls, ceiling, floor, furniture, and all other objects in the space; and brightness, glare, contrasts, highlights and shadows.
- For maximum visual comfort and human well-being, light sources should be shielded in the direct-glare zone and reduced to a minimum in the reflected-glare zone.
- All brightness ratios between visual tasks and surrounding surfaces must be kept to the lowest value possible.

### EFFECT OF LIGHTING LOAD ON AIR CONDITIONING

- Heat produced by lighting load (measured in Btu per hr) = kilowatts \* 3.413  
(\* Includes total power consumed: Lamp watts plus ballast watts loss)
- Tons of air conditioning required to remove a lighting system heat load =  $\frac{\text{Btu per hr}}{12,000}$
- One ton of air conditioning will remove the heat produced by a lighting load of 3500 watts.

### LAYOUT REMINDERS

For the Lighting System Designer

- A customer buys a lighting system to provide an adequate, comfortable and appropriate lighting result-- not because he wants luminaires, lamps, conduit and wiring.
- Luminaires and lighting equipment selected should be appropriate for the structure and the seeing problems involved. Appearance, functional design, direct and reflected glare, shadows, maintenance, and lighting efficiency are all factors to be considered.
- The lighting layout should fit the structural details of the building. If plans and drawings are not available, survey the interior and note location of columns, beams, obstructions and other architectural features.
- Use conventional layouts with symmetrical spacing of units, if possible, with luminaires parallel and perpendicular to walls. Special geometrical patterns may be suitable in some cases but should be avoided generally unless they serve a specific functional or design purpose.
- Use continuous-row fluorescent luminaires in preference to individual units. The completed installation will look better and usually results in economies in wiring and installation.
- Recessed and built-in lighting equipment does not light the ceiling. Check your layout and room surface reflectances to see that use of such equipment will not produce uncomfortably dark ceilings nor excessive brightness ratios in the normal field of view.
- Efficiency of trans-lighted ceilings is dependent to a great extent on the reflectance of the plenum cavity. Be sure lamps can be mounted sufficiently high above diffusers or louvers to provide uniform brightness and spaced properly to provide desired intensity. Paint entire cavity white with highest possible reflectance.
- Suspended luminaires of the direct-indirect type often produce the best lighting result most economically. Check the suspension length carefully and limit it to the dimension which gives reasonably uniform ceiling brightness.
- Luminaire spacings should be used which produce uniform illumination and prevent undesirable shadows.
- Flexible lighting layouts which will permit more luminaires or lamps to be added later should be planned. This will permit an increase in lighting intensity without spoiling the symmetry or architectural harmony of the initial installation.
- Plan the maintenance program along with the lighting layout. Be sure that all luminaires and lighting equipment are easily accessible and are designed to be cleaned easily and quickly.
- Consider the finish and reflection factor of ceiling and side walls. Recommend proper colors and finishes to provide surrounding brightness conditions which promote eye comfort and good seeing conditions.
- Double check all calculations and details to insure the proper number of units and the ultimate desired lighting result.



**DESIGN RECOMMENDATIONS**

<b>RECOMMENDED LIGHTING LEVELS FOR THE HOME</b> (Minimum illumination for household activities)	
Activity (Seeing Task)	Intensity on Task (Footcandles)
Reading Prolonged periods; fine type. Casual periods; books; magazines	40 - 50 20 - 30
Studying	40 - 50
Writing or Typewriting	25 - 40
Game Playing Cards, general games Table tennis, recreational	10 - 20 20 - 50
Drafting (or other detail work)	50 - 100
Sewing Casual, on light goods Prolonged, on light goods Prolonged, average sewing Fine needlework, on dark goods	20 - 30 30 - 50 50 - 100 Over 100
Kitchen Work General Sink, range, food preparation area	10 - 20 40 - 50
Dining General If table used for reading or writing	5 - 10 40 - 50
Laundry Tubs, ironing board, ironer	40 - 50
Make-Up Dressing tables and dressers	20 - 30
Shaving Bathroom mirror	30 - 40
Handicrafts (Knitting, Weaving, etc.)	20 - 30
Bench Work	30 - 50
General Lighting Walking up and down stairs; halls General circulation in rooms	4 - 8 5 - 10
Night Lights Wall recessed, 7½ watts. Burn continuously; locate at all danger spots.	

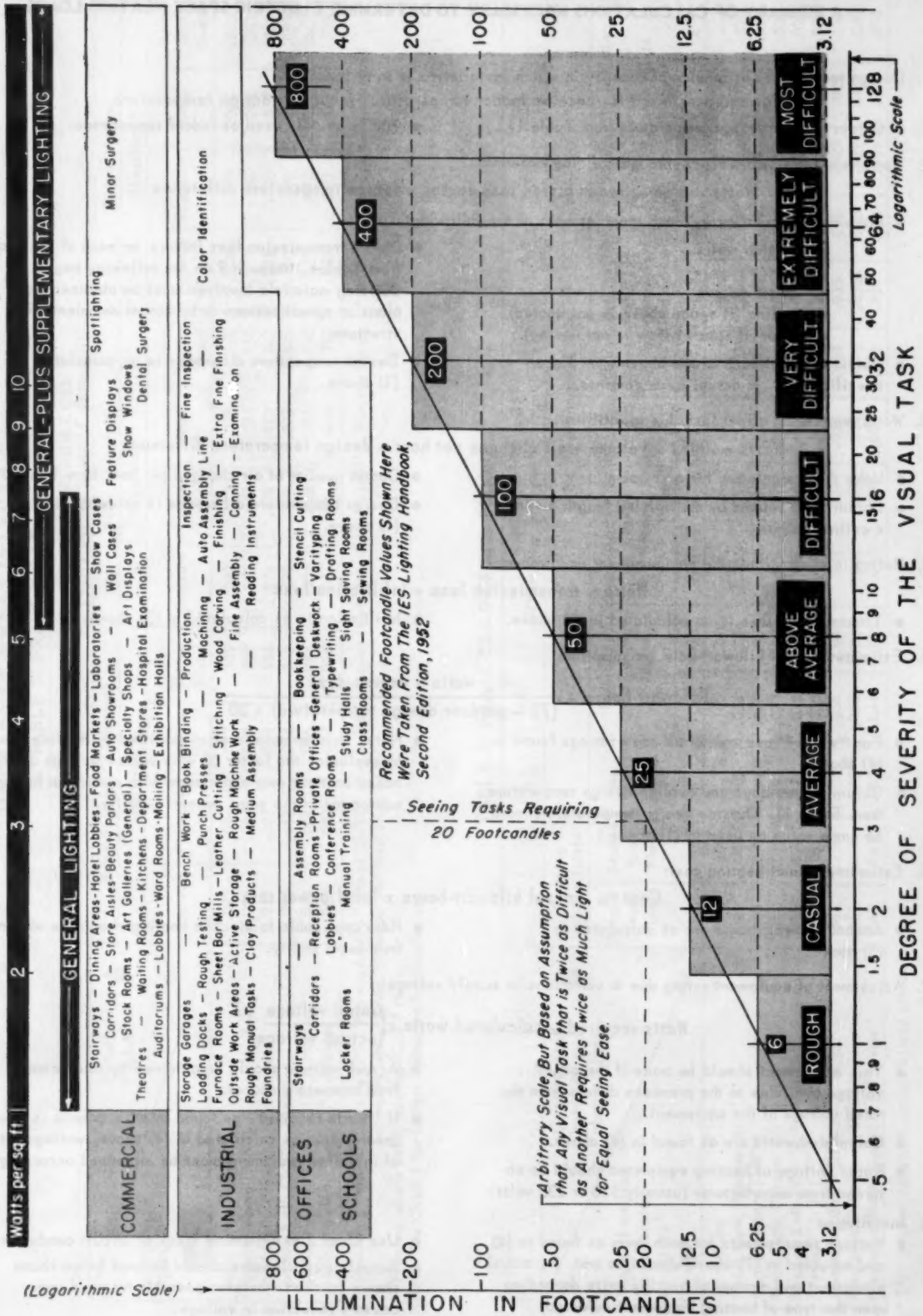
<b>RECOMMENDED INTERIOR REFLECTANCES</b>	
Surface	Reflectance Range (%)
Ceiling	75 - 90
Upper Walls	50 - 65
Trim	40 - 50
Machines	30 - 40
Lower Walls	30 - 50
Furniture	25 - 40
Floors	15 - 30

<b>RECOMMENDED LIGHTING LEVELS FOR PRODUCTION</b> (Maintained in service)*		
Activity (Seeing Task)	Examples of Work	Intensity on Task (Footcandles)
Rough	Inactive storage; corridors	5 (3 - 10)
Casual	Active storage; service areas; stairways; aisles; washrooms	10 (8 - 20)
Average	Moderately fine detail with normal contrasts; intermittent seeing; automatic machine operations; rough grad- ing; packing and shipping	30 (20 - 40)
Above Average	Prolonged work involving moderate contrasts. Ordinary assembly; bench work; machine shop operations	50 (40 - 75)
Difficult	Precision work involving fine detail; fair con- trasts over long periods. Fine assembly; high- speed work	100 (70 - 150)
Very Difficult	Precision work involving finest detail; poor con- trasts over long periods. Extra-fine assembly; precision grinding; extra-fine finishing	200 up

\* Based on Illuminating Engineering Society's "American Recommended Practice on Industrial Lighting."

<b>RECOMMENDED BRIGHTNESS RATIOS FOR INTERIOR LIGHTING</b>	
Condition	Ratio
Between visual tasks and adjacent surroundings Example: White paper and desk top	1 to 1/3
Between visual tasks and more re- mote darker surfaces Example: White paper on desk & floor	1 to 1/10
Between visual tasks and more re- mote brighter surfaces Example: White paper on desk and luminaires	1 to 10
Between luminaires and adjacent surfaces in normal field of view	20 to 1
Anywhere within normal field of view Example: Luminaires and floor	40 to 1

# RECOMMENDED LEVELS OF ILLUMINATION AND WIRING CAPACITIES



## ELECTRIC SPACE HEATING DATA

### A SUMMARY OF CALCULATIONS NECESSARY TO DETERMINE ELECTRIC SPACE HEATING LOADS

1. Design temperature difference-of locality in which installation is to be made:

Design temperature difference = indoor temperature — outdoor design temperature

- Obtain outdoor design temperature from Table 11.      ● 70F is usually used as indoor temperature.

2. Watts required to offset loss through building materials:

Watts = area × transmission loss factor × design temperature difference

- Make this calculation for each room for each of the following:

Outside walls  
Windows  
Outside doors  
Ceiling (if space above is not heated)  
Floor (if space below is not heated)

- Obtain transmission loss factors for each of the above from Tables 1 through 9 on the following pages. Building materials involved must be obtained from plans or specifications or by actual examination of structure.

- Obtain areas of each of the above from plans, specifications, or actual measurements.

- Design temperature difference is as calculated in (1) above.

3. Watts required to offset loss due to infiltration:

Watts = .0053 × volume × air changes per hour × design temperature difference

- Make this calculation for each room.
- Obtain room volume by multiplying length × width × ceiling height.

- Obtain number of air changes per hour from Table 7.
- Design temperature difference is as calculated in (1) above.

4. Rating in watts of heating equipment for each room:

Watts = transmission loss + infiltration loss

- Transmission loss is as calculated in (2) above.      ● Infiltration is as calculated in (3) above.

5. Estimated annual kilowatt-hour consumption:

Kilowatt-hours =  $\frac{\text{watts} \times \text{degree-days}}{(70 - \text{outdoor design temperature}) \times 50}$

- For "watts," use sum of all room ratings found in (4) above.
- Obtain degree-days and outside design temperature from Table 11. (Outside design temperature should be same value as used in (1) above.)

- Note: This formula is often modified by heating people by replacing the factor 50 with values as high as 59, based on their own experience with particular heating equipment in the same general locality.

6. Estimated annual heating cost:

Cost = annual kilowatt-hours × local power rate

- Annual kilowatt-hours are as calculated in (5) above.      ● Rate applicable to electric heating should be obtained from local utility.

7. Adjustment of equipment rating due to variations in supply voltage:

Watts required = calculated watts ×  $\left(\frac{\text{rated voltage}}{\text{actual voltage}}\right)^2$

- This adjustment should be made if the actual voltage available to the premises differs from the rated voltage of the equipment.
- Calculated watts are as found in (4) above.
- Rated voltage of heating equipment should be obtained from manufacturer (usually 118 or 236 volts).

- Actual voltage should be obtained by measurement or from competent source.
- If "watts required" as found by this formula is much greater than as calculated in (4) above, wattage rating of installed equipment must be increased accordingly.

8. Installation

- Wattage requirements for each room as found in (4) and adjusted in (7) above should be met, the actual placement and number of heating units depending upon the type of heating equipment selected.

- Use Chart 2 to determine sizes of circuit conductors.
- Actual circuit lengths should be kept below those shown on chart wherever possible to avoid unnecessary reduction in voltage.



## HEAT LOSS COEFFICIENTS

TABLE 1. FRAME WALLS

Interior Finish **		TRANSMISSION LOSS (Watts per sq ft per °F temp diff)											
		Wood Siding (Clapboard)						Wood Shingles					
		Sheathing *			Insulating Board			Sheathing *			Insulating Board		
Exterior Finish	Interior Finish **	Gypsum	Plywood	Wood	Gypsum	Plywood	Wood	Gypsum	Plywood	Wood	Gypsum	Plywood	Wood
		Insulating Board	Insulating Board	Insulating Board	Insulating Board	Insulating Board	Insulating Board	Insulating Board	Insulating Board	Insulating Board	Insulating Board	Insulating Board	Insulating Board
Metal Lath, Plaster Gypsum Board (3/8") Wood Lath, Plaster Gypsum Lath (3/8"), Plaster Insulating Board Lath (1/2"), Plaster Insulating Board Lath (1"), Plaster	Metal Lath, Plaster Gypsum Board (3/8") Wood Lath, Plaster Gypsum Lath (3/8"), Plaster Insulating Board Lath (1/2"), Plaster Insulating Board Lath (1"), Plaster	.097	.094	.077	.059	.073	.073	.073	.073	.076	.050	.108	.082
		.094	.094	.077	.059	.073	.073	.073	.073	.076	.050	.105	.082
		.091	.091	.073	.056	.070	.070	.070	.070	.073	.047	.103	.079
		.091	.088	.073	.056	.070	.070	.070	.070	.073	.047	.100	.079
		.064	.064	.056	.044	.056	.053	.056	.053	.056	.038	.070	.059
		.050	.050	.044	.035	.041	.041	.041	.041	.044	.032	.053	.044

\* Sheathing details: Gypsum 1/2"; Plywood 5/16"; Wood 25/32" plus building paper; Insulating Board 25/32". Furring strips 1" thick are assumed between wood shingles and gypsum, plywood and insulating board.

\*\* Plaster, where used, assumed 3/4" thick.

Note: See Chart 1 for factors corrected for insulation.

TABLE 2. FRAME CEILINGS AND FLOORS

Type of ceiling on underside of joists *		TRANSMISSION LOSS (Watts per sq ft per °F temp diff)											
		Flooring above joists						No Flooring above joists					
		Double Wood Floor			No Insulation			Blanket or Bat Insulation Between Joists (Inches)			Vermiculite Insulation (Loose Fill) Between Joists (Inches)		
Construction between and above joists	Type of ceiling on underside of joists *	Single Wood Floor	Double Wood Floor	Double Wood Floor	No Insulation	No Insulation	No Insulation	1" 2" 3"	1" 2" 3"	1" 2" 3"	2" 3" 4"	2" 3" 4"	2" 3" 4"
		132	.088	.088	.073	.073	.073	.108 .076 .056	.070 .056 .056	.035 .035 .035	.027 .027 .027	.053 .053 .053	.032 .029 .029
No ceiling Metal Lath, Plaster (3/4") Gypsum Board (3/8") Wood Lath, Plaster Gypsum Lath (3/8"), Plaster Plywood (3/8") Insulating Board (1/2") Insulating Board Lath (1/2"), Plaster Insulating Board Lath (1"), Plaster	No ceiling Metal Lath, Plaster (3/4") Gypsum Board (3/8") Wood Lath, Plaster Gypsum Lath (3/8"), Plaster Plywood (3/8") Insulating Board (1/2") Insulating Board Lath (1/2"), Plaster Insulating Board Lath (1"), Plaster	.082	.070	.070	.070	.070	.070	.073 .073 .073	.053 .053 .053	.035 .035 .035	.027 .027 .027	.050 .050 .050	.038 .038 .038
		.082	.070	.070	.070	.070	.070	.073 .073 .073	.053 .053 .053	.035 .035 .035	.027 .027 .027	.050 .050 .050	.038 .038 .038
		.064	.056	.056	.056	.056	.056	.047 .047 .047	.044 .044 .044	.029 .029 .029	.024 .024 .024	.041 .041 .041	.032 .028 .028
		.062	.053	.053	.053	.053	.053	.044 .044 .044	.044 .044 .044	.029 .029 .029	.024 .024 .024	.041 .041 .041	.032 .028 .028
		.047	.041	.041	.041	.041	.041	.035 .035 .035	.035 .035 .035	.026 .026 .026	.021 .021 .021	.035 .035 .035	.028 .024 .024
		.047	.041	.041	.041	.041	.041	.035 .035 .035	.035 .035 .035	.026 .026 .026	.021 .021 .021	.035 .035 .035	.028 .024 .024

\* 1/2" plaster assumed, unless stated otherwise.



## HEAT LOSS COEFFICIENTS

TABLE 3. MASONRY WALLS

<div>Interior Finish* ➡</div> <div>Exterior Finish ➡</div>	TRANSMISSION LOSS (Watts per sq ft per °F temp diff)											
	Solid Brick				Poured Concrete				Hollow Brick Blocks (Cinder Aggregate)			
	Thickness (Inches)				Thickness (Inches)				Thickness (Inches)			
	8	12	16		6	8	10	12	8	12		
Plaster on masonry, no furring Metal Lath, Plaster (3/4") Gypsum Lath (3/8"), Plaster Insulating Board (1/2") Insulating Board (1/2"), Plaster Insulating Board (1"), Plaster Gypsum Lath (3/8"), Plaster, Blanket Insulation (1")	.135	.100	.079		.208	.188	.170	.155	.114	.105		
	.094	.073	.062		.123	.114	.108	.103	.082	.076		
	.088	.070	.059		.114	.105	.100	.097	.079	.073		
	.064	.056	.050		.079	.076	.073	.070	.062	.059		
	.064	.056	.047		.076	.073	.070	.067	.059	.056		
	.047	.041	.038		.056	.053	.053	.050	.044	.044		
	.041	.038	.035		.047	.047	.044	.044	.038	.038		

\* 2" furring and 1/2" plaster assumed, unless stated otherwise.

TABLE 4. PITCHED ROOFS

Interior Finish**	Construction between and above Rafters	TRANSMISSION LOSS (Watts per sq ft per °F temp diff)											
		Wood Shingles (on 1 x 4 strips 2" o.c.)				Asphalt Shingles or Roll Roofing (on 1" solid wood sheathing)				Slate or Tile (on 1" solid wood sheathing)			
		Insulation between Rafters* (inches)				Insulation between Rafters* (inches)				Insulation between Rafters* (inches)			
		None	1	2	3	None	1	2	3	None	1	2	3
No ceiling Metal Lath, Plaster (3/4") Gypsum Board (3/8") Wood Lath, Plaster Gypsum Board Plywood (3/8") Insulating Board (1/2") Insulating Board Lath (1/2"), Plaster Insulating Board Lath (1"), Plaster		.141	.044	.029	.024	.152	.044	.032	.025	.161	.047	.032	.025
		.091	.041	.029	.024	.097	.044	.029	.024	.100	.044	.029	.024
		.088	.041	.029	.023	.094	.044	.029	.024	.097	.044	.029	.024
		.085	.041	.029	.023	.091	.041	.029	.024	.094	.044	.029	.024
		.085	.041	.029	.023	.091	.041	.029	.024	.094	.044	.029	.024
		.085	.041	.029	.023	.088	.041	.029	.024	.091	.044	.029	.024
		.064	.035	.026	.021	.067	.035	.027	.022	.070	.038	.027	.022
		.064	.035	.026	.021	.064	.035	.026	.021	.067	.035	.027	.022
		.047	.029	.023	.019	.050	.029	.023	.019	.050	.029	.023	.019

\* Bat or blanket insulation assumed.

\*\* 1/2" plaster assumed, unless stated otherwise.

## HEAT LOSS COEFFICIENTS

TABLE 5. SOLID WOOD DOORS

Nominal Thickness (inches)	TRANSMISSION LOSS (Watts per sq ft per °F temp diff)	
	Exposed Door	With Glass Storm Door*
**	.249	.114
1	.202	.103
1 1/4	.173	.094
1 1/2	.152	.088
1 3/4	.149	.088
2	.135	.082
2 1/2	.111	.073
3	.097	.067

\* 50% glass and thin wood panels

\*\* Thin wood panels or single panes of glass

TABLE 6. WINDOWS

<div>Number of Vertical Glass Sheets</div> <div>Type of Sash*</div>		TRANSMISSION LOSS (Watts per sq ft per °F temp diff)				
		Single Glass	Double Glass		Windows with Storm Sash	
			Air Space (inches)			
None	1/4"	1/2"	1" or more	1" or more		
Large glass areas, 100% glass	.331	.179	.161	.155	-	
Wood	.299	-	-	.148	.140	
Steel	.331	-	-	.186	.155	
Aluminum	.354	-	-	.196	.171	

\* Windows assumed 80% glass, 20% sash, unless stated otherwise.

TABLE 7. AIR CHANGES  
For Estimating Residential Infiltration Heat Loss

Condition	Air Changes per Hour	
	Without Storm Sash or Weather-stripping	With Storm Sash or Weather-stripping
Room with no windows or outside doors	1/2 to 3/4	—
Room with 1 wall exposed	1	1/2
Room with 2 walls exposed	1-1/2	3/4
Room with 3 walls exposed	2	1
Room with 4 walls exposed	2	1
Bath Room	2	2

TABLE 8. CONCRETE FLOOR SLABS (Unheated)

Outdoor Design Temp. (°F)	TRANSMISSION LOSS (Watts per ft of exposed edge)	
	2-inch Edge Insulation*	1-inch Edge Insulation*
-20 to -30	14.5	16
-10 to -20	13	14.5
0 to -10	12	13.5

\* Insulation should extend 24 inches horizontally under floor; or 24 inches down along the foundation wall below floor level.

TABLE 9. BASEMENT WALLS\*

Type of Wall	TRANSMISSION LOSS (Watts per sq ft per °F temp diff)
Concrete or Concrete Block	.02

\* For walls 3 ft or more below grade. For portion of walls from 3 ft below to grade level, use factors given in Table 3.

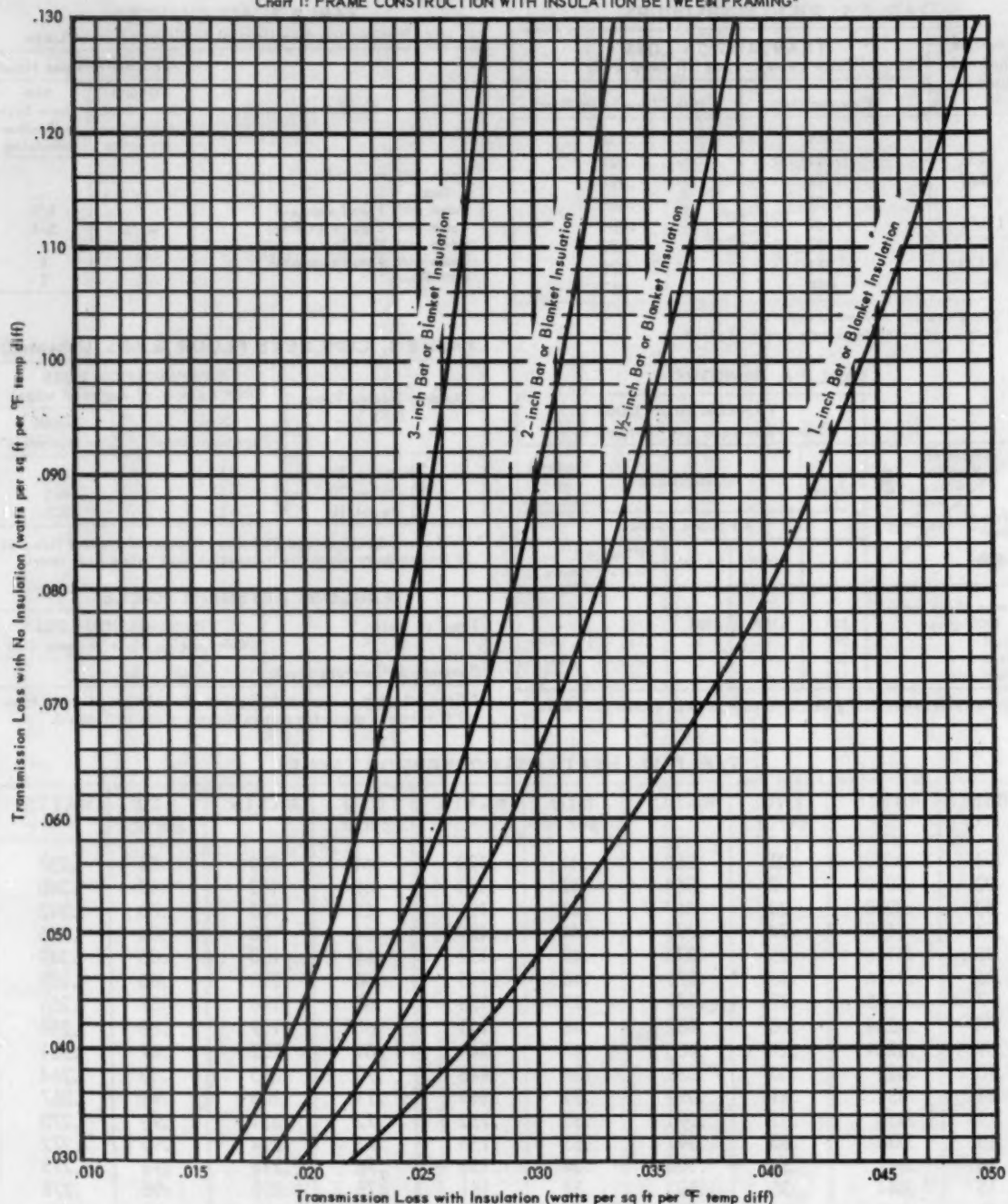
TABLE 10. HEAT LOSS CONVERSION TABLE\*

BTU per hr	WATTS	BTU per hr	WATTS	BTU per hr	WATTS	BTU per hr	WATTS	BTU per hr	WATTS
.01	.0029	.21	.062	.41	.120	.61	.179	.81	.237
.02	.0059	.22	.064	.42	.123	.62	.182	.82	.240
.03	.0088	.23	.067	.43	.126	.63	.185	.83	.243
.04	.0117	.24	.070	.44	.129	.64	.188	.84	.246
.05	.0146	.25	.073	.45	.132	.65	.190	.85	.249
.06	.0176	.26	.076	.46	.135	.66	.193	.86	.252
.07	.0205	.27	.079	.47	.138	.67	.196	.87	.255
.08	.0234	.28	.082	.48	.141	.68	.199	.88	.258
.09	.0264	.29	.085	.49	.144	.69	.202	.89	.261
.10	.029	.30	.088	.50	.146	.70	.205	.90	.264
.11	.032	.31	.091	.51	.149	.71	.208	.91	.267
.12	.035	.32	.094	.52	.152	.72	.211	.92	.270
.13	.038	.33	.097	.53	.155	.73	.214	.93	.272
.14	.041	.34	.100	.54	.158	.74	.217	.94	.275
.15	.044	.35	.103	.55	.161	.75	.220	.95	.278
.16	.047	.36	.105	.56	.164	.76	.223	.96	.281
.17	.050	.37	.108	.57	.167	.77	.226	.97	.284
.18	.053	.38	.111	.58	.170	.78	.229	.98	.287
.19	.056	.39	.114	.59	.173	.79	.231	.99	.290
.20	.059	.40	.117	.60	.176	.80	.234	1.00	.293

\* Tables 1 through 9 were computed from data from the 1955 Guide of the American Society of Heating and Air-Conditioning Engineers. For other constructions given in the Guide and not included in these tables, apply the above factors to convert Btu per hr to watts.

## HEAT LOSS COEFFICIENTS

Chart 1: FRAME CONSTRUCTION WITH INSULATION BETWEEN FRAMING\*



\*These curves may be used to determine the transmission loss factors of frame construction with blanket- or bat-type insulation between the framing. They are applicable to hollow frame walls, ceilings and roofs having structural materials on both sides of framing.

## Assumptions:

Framing covers 15% of total surface area.  
Insulation heat loss coefficient ( $U$ ) = .27 Btu per hr per sq ft per °F temp diff.

One air space assumed between framing for 1, 1½, and 2-inch thicknesses.

Air space neglected for 3-inch thickness.

Note: For 3 5/8-inch thickness of loose fill insulation ( $U$  = .30) in walls (no air space), use 3-inch curve and subtract .001 from result.

## Example:

Given a wall of brick veneer, 1-inch wood sheathing, building paper, 2x4 framing, and 3/8-inch gypsum board. To find the transmission loss factor with 3-inch mineral wool blankets between framing, first obtain from Table 1 the factor without insulation (.082). Locate this value on the vertical scale of the chart above. Move horizontally to the right to the 3-inch curve; then down to the horizontal scale, which shows the required factor to be .025.



TABLE II. DEGREE-DAYS AND DESIGN TEMPERATURES (°F)

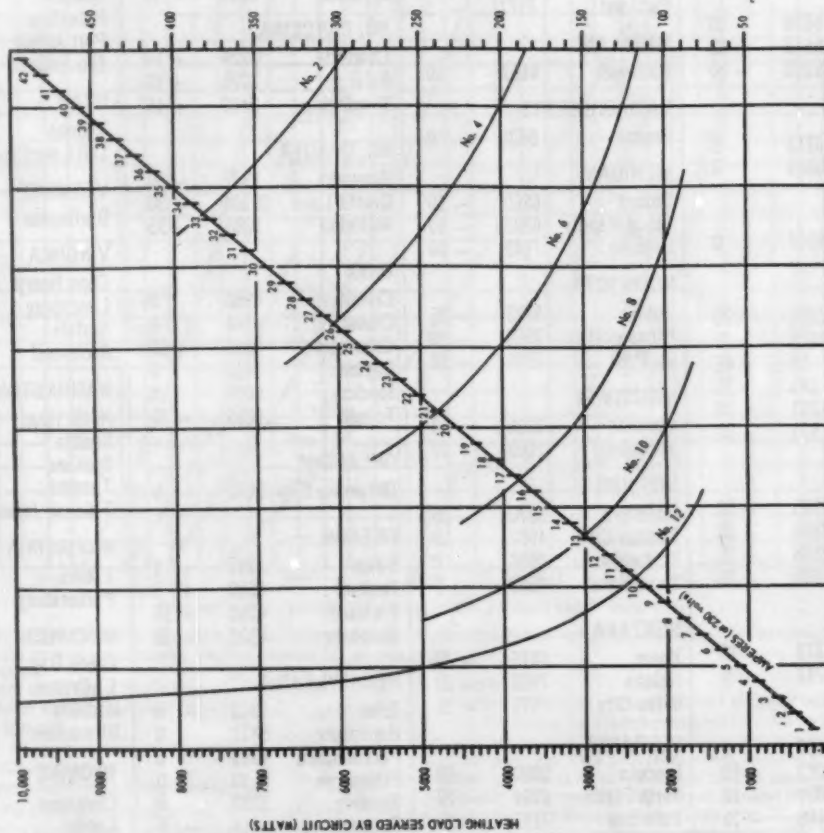
Locality	Annual Degree Days	Outside Design Temp.	Locality	Annual Degree Days	Outside Design Temp.	Locality	Annual Degree Days	Outside Design Temp.	Locality	Annual Degree Days	Outside Design Temp.
<b>ALABAMA</b>			<b>INDIANA</b>			<b>NEVADA</b>			<b>RHODE ISLAND</b>		
Anniston	2806	+ 5	Fort Wayne	6232	- 10	Reno	5621	- 5	Block Island	5897	0
Birmingham	2611	+ 10	Indianapolis	5458	- 10	Winnemucca	6357	- 15	Providence	5984	0
Mobile	1566	+ 15	Terre Haute	5117	- 10	<b>NEW HAMPSHIRE</b>			<b>SO. CAROLINA</b>		
Montgomery	2071	+ 10	<b>IOWA</b>			Concord	7400	- 15	Charleston	1866	+ 15
<b>ARIZONA</b>			Charles City	7624	- 15	<b>NEW JERSEY</b>			Columbia	2488	+ 10
Flagstaff	7241	- 10	Davenport	6252	- 15	Atlantic City	5015	+ 5	Greenville	3059	+ 10
Phoenix	1441	+ 25	Des Moines	6375	- 15	Cape May	4870	0	<b>SO. DAKOTA</b>		
Yuma	1036	+ 30	Sioux City	6905	- 20	Newark	5500	0	Huron	7940	- 20
<b>ARKANSAS</b>			<b>KANSAS</b>			Sandy Hook	5369	0	Rapid City	7197	- 20
Fort Smith	3226	+ 10	Concordia	5425	- 10	Trenton	5256	0	<b>TENNESSEE</b>		
Little Rock	3009	+ 5	Dodge City	5069	- 10	<b>NEW MEXICO</b>			Chattanooga	3238	10
<b>CALIFORNIA</b>			Topeka	5075	- 10	Albuquerque	4517	0	Knoxville	3658	0
Eureka	4758	+ 30	Wichita	4644	- 10	<b>NEW YORK</b>			Memphis	3090	0
Fresno	2403	+ 25	<b>KENTUCKY</b>			Albany	6648	- 10	Nashville	3613	0
Los Angeles	1391	+ 35	Louisville	4417	0	Binghamton	6818	- 10	<b>TEXAS</b>		
Red Bluff	2653	+ 25	<b>LOUISIANA</b>			Buffalo	6925	- 5	Abilene	2573	+ 15
Sacramento	2680	+ 30	New Orleans	1203	+ 20	Canton	8305	- 25	Amarillo	4196	- 10
San Diego	1596	+ 35	Shreveport	2132	+ 20	Ithaca	6914	- 15	Brownsville	628	+ 30
San Francisco	3137	+ 35	<b>MAINE</b>			New York	5280	0	Corpus Christi	965	+ 20
San Jose	2823	+ 25	Eastport	8445	- 10	Oswego	7186	- 10	Dallas	2367	0
<b>COLORADO</b>			Greenville	9439	- 20	Rochester	6772	- 5	Fort Worth	2355	+ 10
Denver	5839	- 10	Portland	7377	- 5	Syracuse	6899	- 10	Houston	1315	+ 20
Grand Junction	5613	- 15	<b>MARYLAND</b>			<b>NO. CAROLINA</b>			Palestine	2068	+ 15
Pueblo	5558	- 20	Baltimore	4487	0	Charlotte	3224	+ 10	Port Arthur	1352	+ 20
<b>CONNECTICUT</b>			<b>MASSACHUSETTS</b>			Raleigh	3275	+ 10	San Antonio	1435	+ 20
Hartford	6113	0	Boston	5936	0	Wilmington	2420	+ 15	<b>UTAH</b>		
New Haven	5880	0	<b>MICHIGAN</b>			<b>NO. DAKOTA</b>			Modena	6598	- 15
<b>D. C.</b>			Detroit	6560	- 10	Bismark	8937	- 30	Salt Lake City	5650	- 10
Washington	4561	0	Grand Rapids	6702	- 10	Devils Lake	10104	- 30	<b>VERMONT</b>		
<b>FLORIDA</b>			Lansing	7149	- 10	Williston	9301	- 35	Burlington	8051	- 10
Apalachicola	1252	+ 25	<b>MINNESOTA</b>			<b>OHIO</b>			<b>VIRGINIA</b>		
Jacksonville	1185	+ 25	Duluth	9723	- 25	Cincinnati	4990	0	Cape Henry	3538	+ 10
Key West	59	+ 45	Minneapolis	7966	- 20	Cleveland	6144	0	Lynchburg	4068	+ 5
Miami	185	+ 35	St. Paul	7975	- 20	Columbus	5506	- 10	Norfolk	3364	+ 15
Pensacola	1281	+ 20	<b>MISSISSIPPI</b>			Dayton	5412	0	Richmond	3922	+ 15
Tampa	571	+ 30	Meridian	2338	+ 10	Sandusky	6095	0	<b>WASHINGTON</b>		
<b>GEORGIA</b>			Vicksburg	2069	+ 10	Toledo	6269	- 10	North Head	5367	+ 20
Atlanta	2985	+ 10	<b>MISSOURI</b>			<b>OKLAHOMA</b>			Seattle	4815	+ 15
Augusta	2306	+ 10	Columbia	5070	- 10	Oklahoma City	3670	0	Spokane	6318	+ 15
Macon	2338	+ 15	Kansas City	4962	- 10	<b>OREGON</b>			Tacoma	5039	+ 15
Savannah	1635	+ 20	St. Louis	4596	0	Baker	7197	- 5	Tatoosh Island	5857	+ 15
<b>IDAHO</b>			Springfield	4569	- 5	Medford	4650	+ 5	<b>W. VIRGINIA</b>		
Boise	5678	- 10	<b>MONTANA</b>			Portland	4353	+ 10	Elkins	5800	- 10
Pocatello	6741	- 5	Havre	8416	- 30	Roseburg	4332	+ 10	Parkersburg	4928	- 10
<b>ILLINOIS</b>			Helena	7930	- 20	<b>PENNSYLVANIA</b>			<b>WISCONSIN</b>		
Cairo	3957	0	Miles City	7591	- 35	Erie	6363	- 5	Green Bay	7931	- 20
Chicago	6282	- 10	<b>NEBRASKA</b>			Harrisburg	5412	0	LaCrosse	7421	- 25
Peoria	6004	- 10	Lincoln	5980	- 10	Philadelphia	4739	0	Madison	7405	- 15
Springfield	5446	- 10	North Platte	6384	- 20	Pittsburgh	5430	0	Milwaukee	7079	- 15
			Valentine	7197	- 25	Reading	5232	0	<b>WYOMING</b>		
						Scranton	6218	- 5	Cheyenne	7536	- 15
									Lander	8243	- 20



CHART 2: RECOMMENDED WIRE SIZES AND CIRCUIT LENGTHS FOR ELECTRIC SPACE HEATING CIRCUITS

SIZE OF CONDUCTOR (A.W.G.) - TYPE RH

Scale C	No. 12	No. 10	No. 8	No. 6	No. 4	No. 2
Scale B	No. 12	No. 10	No. 8	No. 6	No. 4	No. 2
Scale A	No. 12	No. 10	No. 8	No. 6	No. 4	No. 2



Scale A	No. 12	No. 10	No. 8	No. 6	No. 4	No. 2
Scale B	No. 12	No. 10	No. 8	No. 6	No. 4	No. 2
Scale C	No. 12	No. 10	No. 8	No. 6	No. 4	No. 2

SIZE OF CONDUCTOR (A.W.G.) - TYPES R &amp; T

## NOTES

1. If more than one heater is used on a circuit, the N.E.C. limits the total load on the circuit to 24 amps, with a 30-amp maximum overcurrent protective device.
2. For wire Types R or T (or equivalent): Use scales A, B or C at bottom of chart.
3. For wire Type RH (or equivalent): Use scales A, B or C at top of chart.
4. Use Scale A: If the wiring is installed either in heated exterior walls outside of the thermal insulation; or above heated ceilings over thermal insulation at least 2 inches thick; or in walls, partitions or ceilings which do not contain heating equipment.
5. Use Scale B: If any part of the wiring is installed in heated interior walls or partitions.
6. Use Scale C: If any part of the wiring is installed above heated ceilings within the thermal insulation, or above heated ceilings having no thermal insulation.
7. Scales A, B and C may also be used to find required sizes of wiring not connected with the heating system but passing through walls or ceilings as described above.
8. In using chart for 115-volt circuits, follow the procedure described below, but begin with a heating load equal to twice the actual load.

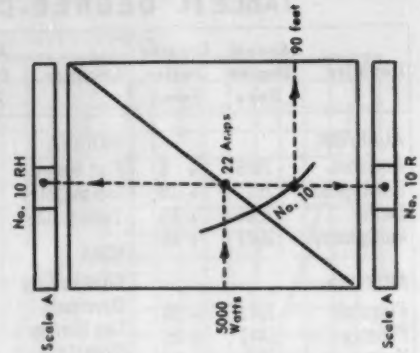
## HOW TO USE CHART

Assume load is a 5000-watt, 230-volt heater, the wiring to be entirely in outside walls outside the thermal insulation.

1. Locate heating load (5000 watts) on left hand scale. Using straight-edge, move horizontally to diagonal line, which indicates the current (22 amps).

2. To find the Type RH wire size required, move up from the diagonal to Scale A at top of chart and read wire size (No. 10). If Type R or T is to be used, move down from diagonal and read the wire size (also No. 10) on Scale A at bottom of chart. (See note 4 above.)

3. To find the maximum one-way circuit length to avoid more than 2% voltage drop, go down from the diagonal to the curve representing the wire size selected (No. 10), then horizontally to the right-hand scale, which gives the circuit length (90 feet).



## DESIGN CONSIDERATIONS

Following is an outline of usual factors involved in laying out paging, public address and music distribution systems:

## I. LOUDSPEAKERS

- A. Number of speakers** (depends upon size, shape and type of area)
- One or a few, each operating at high output (high-level speaker system)
  - Relatively large number, each operating at low output (low level speaker system)

**B. Types of speakers**

- Cone speakers in wall-mounted, ceiling-mounted, or suspended-baffle enclosure
- Horn speaker (trumpet, projector horn, re-entrant horn, etc)

**C. Amplifier connection**

- Direct connection to amplifier output taps corresponding in impedance value (ohms) to impedance value (ohms) of a single speaker or of a number of speakers in series, parallel, or series-parallel
- Connection to amplifier constant-voltage output taps (70, 100, 140 volts, etc) through constant-voltage line-matching transformers
- Connection to amplifier high-impedance output taps (250 or 500 ohms) through constant-impedance line-matching transformers

**D. Placement of speakers**

- Assure uniform loudness (eliminate dead or hot spots)
- In churches, theatres and auditoriums, place speakers well forward of microphones to prevent feedback (squealing)
- Minimize reverberation (sound bouncing around)

## II. AMPLIFIERS

**A. Power output**

- Typical ratings: 6, 10, 15, 30, 50, 70, 100, 125, 250 watts
- Output required depends upon size and type of area to be covered by sound system (see accompanying table)

**B. Number and types of inputs** (terminals for connecting high- and/or low-impedance microphones, record player or radio tuner)**C. Output taps** (impedance values)

- Direct connection: 4-, 8- and 16-ohm taps
- Constant-voltage line transformer connection: 70-, 100- or 140-volt taps
- Constant-impedance line transformer connection: 250- and/or 500-ohm taps

**D. Special functions**

- Record player built into amplifier housing
- Amplifier, microphone and speakers in carrying case (portable system)

**E. Controls**

- Tone
- Anti-feedback

**F. Remote volume controller** (plug-in unit for use at distance from amplifier)**G. Power source**

- 110-125 vac, 60 cycles
- 115 vac, 25 cycles

- 115 vdc
- 6 or 12 vdc

**H. Amplifier mounting**

- Portable, with protective cage
- Panel-mounted, for installation on rack

**I. Cost** (increases with power rating and fidelity of reproduction)**J. Separate preamp unit** (for one or more remotely located power or booster amplifiers)**K. Custom assemblies** (amplifier, preamp, radio tuner, record player, or other input devices mounted in vertical cabinet rack or console cabinet)

## III. INPUT DEVICES

**A. Microphones**

- Crystal, dynamic or velocity
- Omni-directional, bi-directional, or uni-directional (cardioid)

**B. Record player** (automatic or manual)**C. Tape player****D. FM-AM radio tuner****E. Tone generator**

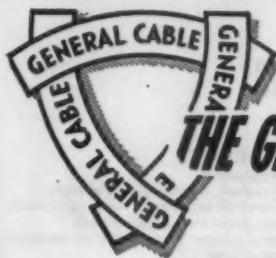
- To produce tone signal for factory work shifts, lunch periods, etc.
- Electronic siren for alarm applications
- To simulate sound of large bell in church belfry

## TYPICAL SYSTEM DATA FOR VARIOUS APPLICATIONS

Application	Sq. Ft. Area	Amplifier Rating (Watts)	Number of Speakers	Type of Speakers
Auditoriums	2,000	15	2	12" Cone in Wall Baffles
	5,000	30	2	12" Cone in Wall Baffles
	15,000	50	4	12" Projector Horns
Ballrooms	2,000	15	4	12" Cone in Wall Baffles
	4,000	30	4	
	10,000	50	6	
Churches	1,000	10	2	10" Cone in Wall Baffles
	4,000	15	2	12" Cone in Wall Baffles
	15,000	30	4	
Classrooms, Offices and Stores	500	10	1	8" Cone in Wall Baffle
	2,000	15	2	10" Cone in Wall Baffles
	8,000	30	4	
Factories	1,000	15	2	12" Projector Horns
	4,000	30	4	
	8,000	50	4	Re-Entrant Horns
	40,000	100	10	
Funeral Parlors	1,000	10	1	12" Cone in Wall Baffles
	4,000	15	4	
	10,000	30	8	
Restaurants and Night Clubs	1,000	15	2	12" Projector Horns
	5,000	30	6	
	10,000	50	12	
Stadiums and Gymnasiums	3,000	15	2	12" Cone in Wall Baffles
	10,000	30	4	Re-Entrant Horns
	50,000	100	8	

## NOTES:

- Values given in table are averages—not minimums or maximums.
- Number of speakers and amplifier power rating should be increased where background noise is higher than normal for the type of area.
- Although wall baffles are indicated for cone speakers, ceiling-recessed or suspended baffles are frequently advantageous.
- Acoustically "live" areas generally require lower speaker sound levels.
- Number of speakers will vary with shape of the plan view of the area.



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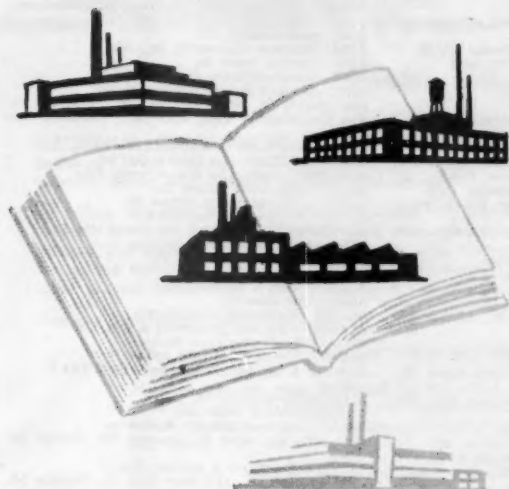


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# Company and Trade Name Directory



Alphabetical listing of company names,  
trade names and addresses

## The following listing contains

- 1 Company names, with complete addresses
- 2 Company division names, listed both under the division name and that of the parent company, with complete addresses
- 3 Company trade names, in capital letters for easy reference
- 4 Other names by which companies may be or may have been known, cross-referenced to present company

All addresses listed were reported by manufacturers as being correct as of 1955, except where the address is followed by an asterisk (\*). These addresses were correct as of 1954 but were not verified by the manufacturers during 1955. They have been included, however, to make the listings as complete and as useful as possible.

Trade names are listed solely on the basis of information supplied by the manufacturer and are not guaranteed to be registered or the exclusive property of the manufacturer concerned.



## A

A-A Electric Mfg. Co., Inc., 131 Chestnut St., New Haven, Conn.  
 AAA—Chelsea Elevator Co.  
 AB—Anaconda Wire & Cable Co.  
 AB—Chelsea Elevator Co.  
 A.B.C.—Columbia Cable & Electric Corp.  
 ACCO—Page Steel & Wire Div., American Chain & Cable Co., Inc.  
 A.C.E.—Arro Expansion Bolt Co.  
 ACEC Electric Corp., 40 E. 49 St., New York 17, N.Y.  
 A.C.L.—Columbia Cable & Electric Corp.  
 A.C.O.—General Control Co.  
 ACP—Allis-Chalmers Mfg. Co.  
 ACW—American Crocote Works Inc.  
 ADT Protection Services—see American District Telegraph Co.  
 AECO—American Electric Cable Co.  
 AFCC—Alhambra Foundry Co., Ltd.  
 AG—Farrelloy Company  
 A.G.A. Div., Elastic Stop Nut Corp. of America, 1027 Newark Ave., Elizabeth, N.J.  
 A.G.E. Inc.—see Affiliated Gas Equipment, Inc.  
 AHT—Anaconda Wire & Cable Co.  
 A.J.F. Industries, Inc.—see Atlantic Transformer Div., New London Instrument Co., Inc.  
 ALK Industries—see Jay Broiler Co.  
 AMC—Beam Manufacturing Co.  
 ANW—Anaconda Wire & Cable Co.  
 A-P Controls Corp., 2450 North 32nd, Milwaukee 45, Wis.  
 APAC—Kashey & Mattison Co.  
 APJ—Assembly Products, Inc.  
 A.P.M.—Automatic and Precision Mfg. Co.  
 AQ—Anaconda Wire & Cable Co.  
 A.R.—Altken-Reed Inc.  
 A&R—Air & Refrigeration Corp.  
 A-S-E—All-Steel Equipment Inc.  
 ASMC—Farrelloy Company  
 ATC—Automatic Temperature Control Co., Inc.  
 ATW—Anaconda Wire & Cable Co.  
 A.W.H. Co.—see Hayden Co., A.W.  
 A-Z—Plastic Wire & Cable Corp.  
 Aaron Insect Lektrolator Co., 10626 Regent St., Los Angeles 34, Calif.  
 Abart Gear & Machine Co., 4830 W. 16 St., Chicago 50, Ill.  
 ABOGLAS—Nativar Corp.  
 Abolite Lighting Div., Jones Metal Products Co., West Lafayette, Ohio  
 Abrams Instrument Corp., 606 E. Shawnee St., Lansing, Mich.  
 Abrams Lighting, 3432 Market St., Phila. 4, Pa.  
 ABRASOWELD—Lincoln Electric Co.  
 ABSORB-A-SHOCK—Federal Shock Mount Corp.  
 ACCENTLITE—Associated Lighting Service  
 ACCOLITE—Accurate Insulated Wire Corp.  
 ACCPREME—Accurate Insulated Wire Corp.  
 ACCTHERM—Accurate Insulated Wire Corp.  
 ACCURATE—Pyrene Manufacturing Co.  
 Accurate Engineering Co., 2005 Blue Island Ave., Chicago 8, Ill.  
 Accurate Insulated Wire Corp., 25 Fox St., New Haven 13, Conn.  
 Accurate Manufacturing Co., Inc., 44 Hepworth Place, Garfield, N.J.  
 Accurate Threaded Fasteners, Inc., 2901 W. Montrose Ave., Chicago, Ill.\*  
 ACCWIRE—Accurate Insulated Wire Corp.  
 ACE—Arro Expansion Bolt Co.  
 ACE—Armature Coil Equipment, Inc.  
 ACE—Peer, Inc.  
 Ace Co., 112 W. Washington St. (Box 1212), Ocala, Fla.  
 Ace Soring Mfg. Co., Inc., 78 West Houston St., New York 12, N.Y.  
 ACHESON—National Carbon Co.  
 ACID-CAUSTICBOND—Wilbur & Williams Co.  
 ACIDOLITH—Maryland Lvs Co.  
 Ackerman-Johnson Co., 624 Jackson Blvd., Chicago 6, Ill.  
 ACME—Co-Operative Utilities Co., Inc.  
 Acme Battery Corp., 59 Pearl St., Brooklyn 1, N.Y.  
 Acme Electric Corp., 36 Water St., Cuba, N.Y.  
 Acme Electric Heating Co., 1217 Washington St., Boston 18, Mass.  
 Acme Electric Welder Co., 2618 Fruitland Ave., Los Angeles 58, Calif.  
 Acme Fire Alarm Company, Inc., 106 Seventh Ave., New York 11, N.Y.  
 Acme Industries, Inc., 620 N. Mechanic St., Jackson, Mich.  
 Acme Lite Products Co., Congers, N.Y.  
 Acme Manufacturing & Gasket Co., 738-40 North 41 St., Philadelphia 4, Pa.  
 Acme Metal Etching Co., Inc., 4857 St. Aubin, Detroit 7, Mich.\*  
 Acme-National Refrigeration Co. Inc., 29-24 40th Ave., Long Island City 1, N.Y.  
 Acme Steel Co., 2840 Archer Ave., Chicago 8, Ill.\*  
 Acme Welded Pipe & Coil Co.—see Acme Industries, Inc.  
 ACMFLITE—Acme Rotary Corp.  
 ACORN—Graton & Knight Co.  
 Acorn Insulated Wire Co., Inc.—see Leviton Mfg. Co. Inc.  
 ACQUITION—Dictograph Products Inc.  
 Acra Electric Corp., 9901 Pacific Ave., Franklin Park, Ill.  
 Acra Industrial Electric Co.—see Acra Electric Corp.  
 ACROTHERM—Minneapolis-Honeywell Regulator Co.  
 ACRAWATT—Acra Electric Corp.  
 Acra Mfg. Co., Crise Controls Div., 2040 E. Main St., Columbus 16, Ohio\*  
 Acro-Ma Switch Div., Acro Mfg. Co., 2040 E. Main St., Columbus 16, Ohio

Acro Tool & Die Works, 4554 Broadway, Chicago 40, Ill.  
 Acro Welder Mfg. Co., 1790 W. St. Paul Ave., Milwaukee 3, Wis.  
 ACROM CAST-X—Acme Electric Heating Co.  
 ACROMATIC—Acro Welder Mfg. Co.  
 ACTIVATED JACK FROST—McKay Chemical Co., Inc. Active Specialty Corp., 302 North Water St., Newburgh, New York  
 ACTRON—Radionic Transformer Co.  
 ACUSTI LUMINUS—Luminous Ceilings, Inc.  
 AD-A-LITE—Norma Lites, Inc.  
 Adaleit Mfg. Co., 14300 Lorain Ave., Cleveland 11, Ohio  
 Adam Electric Co., Frank, P. O. Box 357, St. Louis, Mo.  
 ADAPT ALL—Beckley Electric Co., Inc.  
 ADAPT-A-LITE—Cable Electric Products, Inc.  
 ADAPT-A-LITE—Smith-Victor Corp.  
 ADAPTABEL—Edwards Company, Inc.  
 ADAPTAHORN—Edwards Company, Inc.  
 ADAPTALITE—MiroFlector Co., Inc.  
 Adcrafters Co., 325 W. Huron St., Chicago 10, Ill.  
 ADD-A-BREAKER—Westinghouse Electric Corp.  
 ADD-A-PANEL—Hales Electric Co.  
 ADD-A-PHASE—System Analyzer Corp.  
 ADD-A-POINT—Wama Co.  
 ADD-A-UNIT—Blonder-Tongue Laboratories, Inc.  
 ADDA-STRIP—Garden City Plating & Mfg. Co.  
 ADJUST-A-VOLT—Standard Electrical Products Co.  
 ADJUSTO-O-LITES—Litecraft Manufacturing Corp.  
 ADJUSTO-MATIC—Westinghouse Electric Corp.  
 ADJUSTO-O-SPOTS—Litecraft Manufacturing Corp.  
 Adjusta Post Mfg. Co., 908 St. Clair St., Akron 7, Ohio  
 Adjustable Fixture Co., 104 East Mason St., Milwaukee 2, Wisconsin  
 ADJUSTO-CORD—Dominion Electric Corp.  
 ADJUSTO DECK—Haertel Co., Walter  
 ADJUSTOHH—Ward Leonard Electric Co.  
 ADMIRAL—General Cabinet Corp.  
 Admiral Corporation, 3800 Cortland St., Chicago 47, Illinois  
 ADVANCE—Acme Battery Corp.  
 ADVANCE—Driver-Harris Co.  
 Advance Electric & Relay Co., 2435 North Naomi St., Burbank, California\*  
 Advance Transformer Co., 2950 N. Western Ave., Chicago 18, Ill.\*  
 AEMCO—Automatic Electric Mfg. Co.  
 AER-O-FOAMSTER—National Foam System, Inc.  
 Aeromotor Co., 2500 Roosevelt Rd., Chicago 8, Ill.\*  
 AERO—American District Telegraph Co.  
 AERO-FAN—Pyrene & Co., Inc.  
 Aero Instrument Company, 11423 Vanowen St., North Hollywood, California  
 AERO MAGNETTE—Heinmann Electric Co.  
 Aero-Motive Manufacturing Co., 1803 Alcott St., Kalamazoo 24, Michigan\*  
 AEODYNE—Jeffrey Mfg. Co.  
 Aerol Products Co., Inc., 69 Wesley St., South Hackensack, N.J.  
 Aerolux Electric Lamp Corp.—see Aerolux Lights Corp.  
 Aerolux Lights Corp., 653 11th Ave., New York 36, N.Y.  
 AEROMAC—Seely Instrument Co. Inc.  
 AEROMASTER—Koopers Co., Inc.  
 AEROPEL—American Radiator & Standard Sanitary Corp.  
 Aerovent Fan Co., Inc., Ash and Block Sts., Piqua, Ohio  
 AEROX—Subex Inc.  
 Aetna Ball & Roller Bearing Co., 4600 W. Schubert Ave., Chicago 39, Ill.\*  
 Aetna Motor Products Co.—see Pollak Corp., Joseph Aetna Scientific Co., Second & Spring Sts., Everett 49, Mass.\*  
 Afro Lite Corp., 1234 N. Paulina St., Chicago 22, Ill.  
 Affiliated Gas Equipment, Inc., Brvant Water Div., 17825 St. Clair Ave., Cleveland 10, Ohio\*  
 AGASTAT—A.G.A. Div., Elastic Stop Nut Corp. of America  
 AGASWITCH—A.G.A. Div., Elastic Stop Nut Corp. of America  
 AGLITES—Guth Co., Edwin F.  
 Ahlberg Bearing Co., 3025 West 47th St., Chicago 32, Illinois\*  
 Ainsworth Lighting Inc., 38-10 Twenty Ninth St., L. I. C. 1, N.Y.  
 Ainsworth Mfg. Corp., Mult-A-Frame Div., 1471-77 E. Atwater St., Detroit 7, Mich.  
 Air Controls, Inc., Div. of Cleveland Heater Co., 2310 Superior Ave., Cleveland, Ohio  
 AIR-CORE—American Phenolic Corp.  
 AIR-DAMPED—Berry Corp.  
 AIR-FLIGHT—Welch Co., W. W.  
 AIR JET—Oster Manufacturing Co., John  
 AIR K'ING—Berns Manufacturing Corp.  
 AIR-LINE—Brown-Brockmeyer Corp.  
 AIR M PELER—Ammerman Co., C. L.  
 Air-Maze Corp., 25000 Miles Rd., Cleveland 28, Ohio  
 AIR MOVER—Mine Safety Appliances Co.  
 AIR-O-LINE—Minneapolis-Honeywell Regulator Co.  
 AIR-O-MOTOR—Minneapolis-Honeywell Regulator Co.  
 Air & Refrigeration Sales Co., 60 E. 42 St., N.Y. 17, N.Y.\*  
 Air & Refrigeration Corp., 439 Madison Ave., N.Y., N.Y.\*  
 AIR RIGHTS—Elwell-Parker Electric Co.  
 Air-Trom, Inc., 3536 W. 16 St., Indianapolis 22, Ind.  
 AIR WAVE—Trade-Wind Motors, Inc.  
 AIR X PELER—Ammerman Co., C.L.  
 AIRBOY—Mitchell Industries, Inc.  
 Aircraft-Marine Products, Inc., 2100 Paxton St., Harrisburg, Pennsylvania\*  
 Aircraft Specialties, Inc., 415 Howard St., Lapeer, Michigan  
 AIRDRAULIC—Rotary Lift Co.  
 AIRE-FLO—Lennox Furnace Co.

AIRE RECTIFIER—Lintern Corp.  
 Airfan Engineering Co., 7401 Telegraph Rd., Los Angeles 22, Calif.  
 AIRFLEX—Falk Corp.  
 Aigard Manufacturing Co., 362 West Erie St., Chicago 10, Illinois  
 AIRGRIT—Matthews & Co., James H.  
 AIRKOO—Crucible Steel Co. of America  
 AIRLUX—Sun-Lite Manufacturing Co.  
 AIRMASTER—Haertel Co., Walter  
 AIRMAT DRIFILTER—Aigard Manufacturing Co.  
 AIROVIBER—Viber Co.  
 Aiseco Mfg. Co., Inc., 435 Mehtood St., Pittsburgh 13, Pa.  
 AIRSPREAD—Hunter Fan & Ventilating Co.  
 AIRSTAT—Minneapolis-Honeywell Regulator Co.  
 AIRSWITCH—Minneapolis-Honeywell Regulator Co.  
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 AJAX—Standard Hygrade Electric Co., Inc.  
 Ajax Electric Co., 954 Frankford Ave., Phila. 23, Pa.  
 Ajax Electrothermic Corp., Ajax Park, Trenton 5, New Jersey  
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 AJAX-HULTGREN—Ajax Electric Co. Inc.  
 AJAX-NORTHROP—Ajax Electrothermic Corp.  
 AJUSCO—Adjustable Fixture Co.  
 AJUSCO-LOC—Adjustable Fixture Co.  
 AJUSTO-SPEDE—Allis Co., Louis  
 AJUSTO-SPEDE—Dynamatic Div., Eaton Mfg. Co.  
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 Alden Products Co., 117 North Main St., Brockton 64, Massachusetts  
 ALDIS—Arnessen Electric Co., Inc.  
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 Alexander-Tagg Industries, Inc., Jacksonville Road at Summit Ave., Harbor, Pa.  
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 ALGCO—Auburn Manufacturing Co.  
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 Atlas Industrial Corp., 849 39th St., Brooklyn, N. Y.  
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 Atlas Sponge Rubber Co., 806 East 61 St., Los Angeles 1, California  
 Atlas Tack Corp., Pleasant & South Sts., Fairhaven, Mass.  
 Atlas Tool & Manufacturing Co., 5147 Natural Bridge Blvd., St. Louis 15, Missouri  
 Atlas Washer Corp.—see Atlas Screw & Specialty Co.  
 ATLITE—Atlas Electric Products Co.  
 ATOM-ARC—Alloy Rods Co.  
 ATMO—Kidd & Co., Inc., Walter  
 Atmo Automatic Fire Alarm Co.—see Scharff, Inc., J. H.  
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 Aurora Pump Div., New York Air Brake Co., 54 Loucks St., Aurora, Ill.  
 AUSTIN—Stonco Electric Products Co.  
 Austin Co., M. B.—see Stonco Electric Products Co.  
 Auth Electric Company, Inc., 34-20 45th St., Long Island City 1, New York  
 Auth Electrical Specialty Co., Inc.—see Auth Electric Co., Inc.  
 AUTHOTONE—Auth Electric Company, Inc.  
 AUTO ARC—Auto Arc-Weld Mfg. Co.  
 Auto Arc-Weld Mfg. Co., 9615 Meech Ave., Cleveland 5, Ohio  
 AUTO-BLOC—Round & Son, Inc., David  
 AUTO-LITE—Electric Auto-Lite Co.  
 AUTOBLAST—Lake Shore Electric Corp.  
 Autocall Company, Shelby, Ohio  
 AUTOCOM—Automatic Control Co.  
 AUTODYNE—Westinghouse Electric Corp.  
 AutoFyrstop Co., 2035 Washington Ave., Phila. 46, Pa.  
 AUTOGAP—Hubbard & Co.  
 Automatic Control Co., 995 University Ave., St. Paul 4, Minn.  
 Automatic Controls Corp., 2390 Winewood, Ann Arbor, Mich.  
 Automatic Devices Co., Inc., 714 Hillgrove Ave., Western Springs, Ill.  
 Automatic Electric Co., 1033 West Van Buren St., Chicago 7, Illinois  
 Automatic Electric Heater Co.—see Sepco Corp.  
 Automatic Electric Mfg. Co., 10 State St., Mankato, Minn.  
 Automatic Precision Mfg. Co., 252 Hawthorne Ave., Yonkers 5, N. Y.  
 Automatic Products Co.—see A. P. Controls Corp.  
 Automatic Switch Co., 391 Lakeside Ave., Orange, New Jersey  
 Automatic Temperature Control Co., Inc., 5212 Pulaski Ave., Philadelphia 44, Pennsylvania  
 Automatic Transportation Co., 101 West 87 St., Chicago 20, Illinois  
 AUTOMAZE—Air-Maze Corp.  
 AUTOPHONE—Couch Co., Inc., S. H.  
 AUTORESET—AutoFyrstop Co.  
 AUTOSSET—Stromberg Time Corp.  
 AUTOSPEED—Stromberg Time Corp.  
 AUTOSTATIC—Lake Shore Electric Corp.  
 AUTOTROL—Westinghouse Electric Corp.  
 Autotron Company, 128 West Main St., Danville, Illinois  
 AUTOVALVE—Westinghouse Electric Corp.  
 AUTRATAT—Ward Leonard Electric Co.  
 Avco Mfg. Corp., Bendix Home Appliances Div., 1339 Arlington St., Cincinnati 25, Ohio  
 AVENARIUS—Carbolite Wood Preserving Co.  
 AVIGATOR—Mitchell Industries, Inc.  
 Avar Corp.—see Atlas Screw & Specialty Co.  
 AXIFLO—Westinghouse Electric Corp.  
 AXIOM—Schwarz Belting Co.

## B

B-LINE—Black Manufacturing Co., M.  
 B-LINE—Brown-Brockmeyer Co., M.  
 BAC—Brunner Manufacturing Co.  
 BBB—Becker Brothers Carbon Co.  
 B.E.P.—Burbank Electrical Products  
 B&G—Bell & Gossett Co.  
 BM—Brigel Method Tool Co.  
 BMC—Bowers Mfg. Co., Inc.  
 BM&D—BM&D, Inc., 7020 Walker St., St. Louis Park, Minn.  
 B-T Labs—see Blonder-Tongue Laboratories, Inc.  
 BTC—Berkshire Transformer Corp.  
 B.T.C.—Brewer-Tichener Corp.  
 B.V.—General Armature & Mfg. Co.  
 BVI—Burgess Vibrocrafters  
 B/W Controller Corp., 2200 East Maple Rd., Birmingham, Michigan  
 BX—General Electric Co., Construction Materials Div.  
 Babaco Alarm Systems, Inc., 723 Washington St., New York 14, New York  
 BADGER—Reliance Automatic Lighting Co.  
 BADGER—United States Rubber Co.  
 Bahnon Company, 1001 South Marshall St., Winston-Salem, North Carolina  
 Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland 10, Ohio  
 Bailey & Perkins Co., 44464 Van Dyke Ave. (P.O. Box 117), Utica, Mich.  
 BAKE-O-LAMP—Weldon Mfg. Co.  
 Baker & Co., Inc., 113 Astor St., Newark 5, N. J.  
 Baker & Adamson—see Allied Chemical & Dye Corp., General Chemical Div.  
 Baker-Barkon Co., 1335 S.W. Morrison St., Portland, Ore.  
 Baker McMillen Co., 134 East Miller Ave., Akron 1, Ohio  
 Baker-Ross, Inc., 602 W. McCarty St., Indianapolis 6, Ind.  
 BAL-O-TROL—Westinghouse Electric Corp.  
 Balance Engineering Co., 5030 W. Lake St., Chicago 44, Ill.  
 BALANCETROL—Automatic Temperature Control Co., Inc.  
 BALCO—Driver Co., Wilbur B.  
 BALD HEAD—Blackhawk Mfg. Co.  
 Baldor Electric Co., 4353 Duncan Ave., St. Louis 10, Mo.  
 BALDWIN-REX—Chain Belt Company  
 BALL RITE—CUMMINS Portable Tool Div., John Oster Mfg. Co.  
 BALLLOTITE—Line Material Co.  
 Ballmore Co., Wayne, Pa.  
 Baltimore Aircraft Co., Inc., 2615-35 Mathews St., Baltimore 18, Md.  
 BAND-IT—Waveland Electric Co.

BANNER-AIRE—Argo Products Co.  
 BANTAM—Britten & Co., Inc., E. F.  
 BANTAM—Connecticut Electric Mfg. Co.  
 BANTAM—Gelber Co., Samuel S.  
 BANTY—Mercury Manufacturing Co.  
 Bar-Brook Manufacturing Co., Inc., 6133-35 Linwood Ave., Shreveport, Louisiana  
 BAR-LITE—Smith-Victor Corp.  
 Barber-Colman Co., 1300 Rock St., Rockford, Illinois  
 Barber Electric Mfg. Co., Inc., 30 Chestnut St., N. Attleboro, Mass.  
 Barber-Greene Co., 507 W. Park Ave., Aurora, Ill.\*  
 BARCOL—Barber-Colman Co.  
 Barkelew Electric Mfg. Co., 1905 Columbia Ave., Middletown, Ohio  
 BARKHIDE—General Cable Corp.  
 Barkon-Frink Tube Lighting Corp.—see Frink Corp.  
 Barkow Mfg. Co., Inc., Aug. G., 2230 South 43 St., Milwaukee 15, Wisconsin  
 Barlow & Seeling Mfg. Co.—see Speed Queen Corp.  
 BARMANCO—Bartlett Mfg. Co.  
 BARN-FLEX—Paranite Wire & Cable Div., Essex Wire Corp.  
 Barnard Co., Inc., B. S., 128 Lafayette St., N. Y. 13, N. Y.  
 Barnard Clay Products Co., Inc.—see Barnard Co., Inc., B. S.  
 Barnes Co., Inc., W. D., 1297 Terminal Ave., Detroit 14, Mich.  
 Barnett Co., G. & H.—see Nicholson File Co.  
 BARNFLEX—Hatfield Wire and Cable Div., Continental Copper and Steel Industries, Inc.  
 BARNHAM—Fitz Water Wheel Co.  
 BARRETT—Duff-Norton Co.  
 Barrett-Cravens Co., 630 Dundee Rd., Northbrook, Illinois  
 Barrett Div., Allied Chemical & Dye Corp., 40 Rector St., New York 6, N. Y.  
 BARRY—Dick Co., Inc., R. & J.  
 Barry Corp., 700 Pleasant St., Watertown 72, Mass.  
 BARRYMOUNT—Barry Corp.  
 BARTAP—Burny Engineering Company, Inc.  
 Barth Corp., 12650 Brookpark Rd., Cleveland 30, Ohio  
 Barth Stamping & Machine Co.—see Barth Corp.  
 Bartlett Manufacturing Co., 3003 East Grand Blvd., Detroit 2, Michigan  
 Barton Corp., P. O. Box 279, West Bend, Wis.  
 Barton Products, Inc., 819 N. Blanchard, Wheaton, Illinois  
 Basford Co., H. R., 235-15th St., San Francisco, Calif.  
 Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa.  
 Basic Products Corp., 215-217 Lincolnway West, Mishawaka, Ind.  
 Battery Products Co., 597-85th Ave., Oakland 12, California  
 BATTERY-SCOPE—McColpin-Christie Corp.  
 Battle Creek Equipment Co., 32 North Washington St., Battle Creek, Michigan  
 Battle Creek Health Products Company—see Battle Creek Equipment Co.  
 Bauer & Black Div.—see Kendall Co., Polyken Products Dept.  
 Bay Products, Inc., 3001 N. 16 St., Phila. 32, Pa.  
 BAY STATE—Boston Woven Hose & Rubber Co.  
 Bay State Elevator Co., P. O. Box 1210, Springfield 1, Massachusetts  
 BAYDUST—Hastings Instruments Co., Inc.  
 BAYLITE—Electro Siliv-A-King Corp.  
 Bayonne Bolt Corp., West Second St., Bayonne, N. J.\*  
 Beam Mfg. Co., Stockdale, Webster City, Iowa  
 BEAM-HUGGER—Round & Son, Inc., David  
 BEAUTYDRYER—Odin Stove Manufacturing Co.  
 BEAUTYHEATER—Odin Stove Manufacturing Co.  
 BEAUTYRANGE—Odin Stove Manufacturing Co.  
 Beaver-Advance Corp., 12th & Factory Sts., Ellwood City, Pa.  
 Beaver Art Metal Corp.—see Beaver-Advance Corp.  
 Beaver Pipe Tools, Inc., 310 Dana Ave., Warren, Ohio  
 Beaver Tool Co.—see Drilex Tools, Inc.  
 Beck Co., Harold, 3640 N. Second St., Phila. 40, Pa.  
 Becker Brothers Carbon Co., 3450 South Laramie Ave., Cicero 50, Illinois  
 Becker Brothers Electric Corp.—see Goldberg & O'Brien Electric Co.  
 Beckley Electric Co., Inc., 468-470 Grand Ave., Brooklyn 38, New York  
 Beckman Instruments, Inc., Arga Div., 220 Pasadena Ave., South Pasadena, Calif.  
 BECO—Westinghouse Electric Corp.  
 BED WARNER—Battle Creek Equipment Co.  
 BEE-VAC—Birtman Electric Co.  
 BEETLE—American Cyanamid Co.  
 BEKO—Balance Engineering Co.  
 BELCO—Bell Electric Company  
 BELCO—Bogue Electric Manufacturing Co.  
 BELCON—Bogue Electric Manufacturing Co.  
 Belden Mfg. Co., 4647 W. Van Buren St., Chicago, 44, Ill.  
 BELDONLITE—Stamford Metal Specialty Co., Inc.  
 BELFONE—Bell Sound Systems, Inc.  
 Belgian Electric Sales Corp., 40 E. 49 St., N. Y. 17, N. Y.  
 BELL—Titan Manufacturing Co., Inc.  
 Bell Electric Co., 1844-50 W. 21 St., Chicago 8, Ill.  
 Bell & Gossett Co., 8200 N. Austin Ave., Morton Grove, Ill.  
 Bell Lumber & Pole Co., 524 Midland Bank Bldg., Minneapolis 1, Minnesota  
 Bell Sound Systems, Inc., 555 Marion Rd., Columbus 7, Ohio  
 Bellevue Industrial Furnace Co., 2620 Crane Ave., Detroit 14, Mich.  
 Belmont Smelting & Refining Works, Inc., 330 Belmont Ave., Brooklyn 7, New York  
 BELT-AIR—Buffalo Forge Co.  
 Benbar Sales—see Barkow Mfg. Co., Inc., Aug. G.  
 Benbow Mfg. Co.—see Insul-8-Corp.  
 BENCO—Benjamin Electric Mfg. Co.

Bendix Home Appliances Div., Avco Mfg. Co., 1339  
Arlington St., Cincinnati 25, Ohio  
Benjamin Electric Mfg. Co., Northwest Highway &  
Seegers Rd., Des Plaines, Ill.  
Benjamin-Leader Div., see Benjamin Electric Mfg. Co.  
Benjamin Reel Products, Inc., 10700 Broadway,  
Cleveland 25, Ohio  
Benson Co., Inc., Alex R., P. O. Box 325, Hudson 2,  
N. Y.  
Benwood-Linze Co., see Vickers Inc., Vickers Electric  
Div.  
BEPCO—Buchanan Electrical Products Corp.  
BERALDY—Driver Co., Wilbur B.  
Berkeley Pump Co., 829 Bancroft Way, Berkeley,  
Calif.  
Berkco Electric Mfg. Corp., 212-40 Jamaica Ave.,  
Queens Village 28, N. Y.  
Berkshire Electric Cable Co., Leeds, Mass.  
Berkshire Transformer Corp., 15 South Ave., New  
Milford, Connecticut  
BERMICO—Brown Company  
BERMUDA—Industrial Lamp Corp.  
Bernard-Franklin Co., Inc., Hedley & Balfour Sts.,  
Phila. 37, Pa.  
Bernina Sewing Machine Co., 29 West 35th St., New  
York 1, New York  
Berns Mfg. Corp., 3050 N. Rockwell St., Chicago, Ill.  
Bernz Co., Inc., Otto, 280 Lyell Ave., Rochester 6,  
New York  
BERNZ-O-MATIC—Bernz Co., Inc., Otto  
Berry Co., William B., 117 Causeway St., Boston 14,  
Mass.  
Bersted Mfg. Co., Div. of McGraw Electric Co., Fos-  
toria, Ohio  
Bertram Co., Harvey P., 561-565 Reading Rd., Cin-  
cinnati 2, Ohio  
BESJET—Wall Manufacturing Co., P.  
BESTO-WIRE—Rhode Island Insulated Wire Co., Inc.  
BESTOIL—Oster Manufacturing Co.  
BETA-PLEX—Wakefield Co., F. W.  
BETHANIZED—Bethlehem Steel Co.  
Bethlehem Steel Co., Bethlehem, Pa.  
Betterlite Mfg. Co., 1922 S. Santa Fe Ave., Los  
Angeles 21, Calif.  
Beverly Shear Mfg. Co., 3004 W. 111 St., Chicago 43,  
Ill.  
BI-FLO—Aerovent Fan Co. Inc.  
BI-LUX—Westinghouse Electric Corp., Lighting Div.  
Biddle Co., James G., 1316 Arch St., Philadelphia 7,  
Pennsylvania  
Biddle Trade Publishing Co., 458 S. Spring St., Los  
Angeles 13, Calif.  
BIERCE—Chance Co., A. B.  
BIG BEAM—U-C-Lite Manufacturing Co.  
BIG CHIEF—Carlson & Sullivan Inc.  
BIG RED—Waco Manufacturing Co.  
Billings & Spencer Co., 1 Laurel St., Hartford 1,  
Connecticut  
BILT-IN—Thermador Electrical Manufacturing Co.  
BILTMORE—Gibson Mfg. Co.  
BLITRITE—American Battery Co., Inc.  
Bin-Dicator Co., 13946 Kercheval Ave., Detroit 15,  
Mich.  
BIN-EYE—Jeffrey Mfg. Co.  
BIN-FLO—Bin-Dicator Co.  
BIN-VUE—Convain, Inc.  
Bios Laboratories, Inc., 19 W. 60th St., New York,  
N. Y.  
BIPRENE—Bishop Manufacturing Corp.  
BIRDBILLS—St. John Engineering Co.  
Birdsell Manufacturing Co., Inc., 750 San Antonio  
Rd., Palo Alto, California  
Birtman Electric Co., 4140 West Fullerton Ave.,  
Chicago 39, Illinois  
BISEAL—Bishop Manufacturing Corp.  
Bishop Manufacturing Corp., 10 Canfield Rd., Cedar  
Grove, New Jersey  
BISLON—Bishop Manufacturing Corp.  
BISOLAR—Battle Creek Equipment Co.  
Bisonite Co., Inc., P. O. Box 84, Kenmore Station,  
Buffalo 17, N. Y.  
BITE-RITE—Disston & Sons, Inc., Henry  
BITOMASTIC—Koppers Co., Inc.  
BLACK ANGUS—Marlin Mfg. Co., Inc.  
BLACK BEAUTY—Texas Crotching Co.  
Black & Decker Mfg. Co., Towson 4, Maryland  
Black Manufacturing Co., M., 300 North Third St.,  
Philadelphia 6, Pennsylvania  
Blackburn Corp., Jasper, 35 Madison St., St. Louis 6,  
Missouri  
Blackburn Specialty Co., see Blaco Mfg. Co.  
Blackhawk Industries, 250 South Main St., Dubuque,  
Iowa  
Blackhawk Mfg. Co., 5325 W. Rogers, Milwaukee 46,  
Wis.  
BLACK-RAY—Ultra-Violet Products, Inc.  
Blaco Manufacturing Co., 6541 Euclid Ave., Cleveland  
3, Ohio  
BLAKE—Couch Company, Inc., S. H.  
BLENDOR—Waring Products Corp.  
BLIMP—Curtis Lighting, Inc.  
Bliss Electronic Corp., Sussex, N. J.  
Blitz Electric Co., 5713 Wentworth Ave., Chicago 21,  
Ill.  
BLO-COLD—Acme Industries, Inc.  
BLO-FAN—Pyne & Company, Inc.  
BLO-GLO—Superior Fuse & Mfg. Co., Inc.  
BLO-R-VAC—Ideal Industries, Inc.  
Blonder-Tongue Laboratories, Inc., 526-36 North Ave.,  
Westfield, N. J.  
BLOW-RITE—Reliable Electric Co.  
BLU-FLEX—Millers Falls Co.  
BLU-MOL—Millers Falls Co.  
BLUE BEAVER—Cornell-Dubilier Electric Corp.  
BLUE BOY—Miracle Paint Rejuvenator Co.  
BLUE BRUTE—Worthington Corp.  
BLUE DIAMOND—United Drill and Tool Corp., Whit-  
man & Barnes Div.  
BLUE-POINT—Snap-on Tools Corp.

BLUE-SEAL—Bisonite Co., Inc.  
BLUE STREAK—American Electric Cable Co.  
BLUEBONNET—Forston Co.  
Blythe, Harry, 1550 Lafayette, Denver 10, Colorado  
BOB-CAT—Republic Steel Corp., Chain Div.  
Bodendick Tool Company, 325 East Main St., Taylor-  
ville, Illinois  
Bodine Electric Co., 2254 W. Ohio St., Chicago 12,  
Ill.  
Bogen Co., Inc., David, 29 Ninth Ave., N. Y. 14,  
N. Y.  
Bogue Electric Mfg. Co., 52 Iowa Ave., Paterson 3,  
N. J.  
BOLMASTER—American Electrical Appliance Corp.  
BOMBSTAIL—Aircraft-Marine Products, Inc.  
BOND-OLIN—Olin Industries, Inc., Electrical Div.  
BOND-ROD—Sherman Mfg. Co., H. B.  
BONDALITE—Electric Auto-Lite Co., Wire and Cable  
Div.  
BONDEZE—Phelps Dodge Copper Products Corp.  
BONDWICH—Metals & Controls Corp.  
Bonnell Electric Manufacturing Co., Inc., 192-194  
Chambers St., New York 7, New York  
Bonnell Electric Specialties—see Bonnell Electric  
Mfg. Co., Inc.  
BORE—TITE—Chicago Rawhide Mfg. Co.  
Borg-Warner Corp., Cleveland Commutator Div., Box  
394, Old Mansfield Rd., Wooster, Ohio  
Borg-Warner Corp., Morse Chain Co. Div., 7601 Central,  
Detroit 10, Mich.  
Borg-Warner Corp., Norge Div., Merchandise Mart  
Plaza, Chicago 54, Illinois  
BORNISIL—Westinghouse Electric Corp.  
BOROHM—Shallcross Mfg. Co.  
Borthig Co., Inc., George C., P. O. Box 115B, East  
Rutherford, N. J.  
BOSS—Huenefeld Co.  
Boston Woven Hose & Rubber Co., Box 1071, Boston  
3, Massachusetts  
BOUDOIR—Industrial Lamp Corp.  
Bours Laboratories, Instrument Sales Corp., 6135  
Magnolia Ave., Riverside, Calif.  
Bowers Battery & Spark Plug Co., Box 1262, Reading,  
Pa.  
Bowers Mfg. Co., Inc., 6700 Avalon Blvd., Los Angeles  
3, Calif.  
Bowser, Inc., 1302 E. Creighton Ave., Fort Wayne 2,  
Indiana  
BOX-LOK—Metalectrics, Inc.  
Brach Mfg. Co., I. S., see Brach Mfg. Corp.  
Brach Mfg. Corp., Div. of General Bronze Corp., 200  
Central Ave., Newark, N. J.  
Brady Milwaukee Co., see Brady Co., W. H.  
Bradley Laboratories, Inc., 168 Columbus Ave., New  
Haven 11, Connecticut  
Brady Co., W. H., 727 West Glendale Ave., Milwaukee  
12, Wisconsin  
Brainin Co., C. S., 320 Washington St., Mt. Vernon,  
New York  
BRALDY—Brainin Co., C. S.  
Brand & Co., Inc., William, North & Valley Sts.,  
Willimantic, Conn.  
Brand Dielectrics, Inc., 57 North St., Willimantic,  
Conn.  
Bramham, Marek & Daeper Inc., see B M D & R  
Inc.  
BRAZALOY—All-State Welding Alloys Co., Inc.  
BRAZECLAD—Americane Silver Co., Inc., Industrial Div.  
BRAZO—Lime Air Products Co.  
BREAKSTONE—Snyder & Son, Inc., M. L.  
BREEZE-AIR—Buffalo Forge Co.  
BREEZE-ALL—Robbins & Myers, Inc., Fan Division  
Breeze Corporations, Inc., 700 Liberty Ave., Union,  
N. J.  
BREEZEBUILDER—Bar-Brook Mfg. Co., Inc.  
BREEZO—Buffalo Forge Co.  
Breuer Electric Mfg. Co., 5100 North Ravenswood  
Ave., Chicago 40, Illinois  
BREW-O-MATIC—Dominion Electric Corp.  
Brewer, Titchener Corp., 111 Fort Watson St., Cort-  
land, New York  
BRICKOTE—Westchester Brickette Products Co., Inc.  
Bridgeport Hardware Mfg. Corp., 461 Iranistan Ave.,  
Bridgeport 5, Connecticut  
Brigell Method Tool Co., 104 Northeast First St.,  
Galva, Illinois  
Bright Light Reflector Co., see Electro-Silv-A-King  
Corp.  
Bright Star Industries, 600 Getty Ave., Clifton, N. J.  
BRINELL—Eitzen Co., Louis C.  
BRISTOL—Vocaline Co. of America, Inc.  
Bristol Company, Waterbury 20, Connecticut  
Bristol Motor Company—see Vocaline Company of  
America, Inc.  
Britten & Co., Inc., E. F., 22 South Ave., Cranford,  
New Jersey  
Broan Manufacturing Co., Inc., 1669 North Water  
St., Milwaukee 2, Wisconsin  
BRONCO—Metals & Controls Corp.  
BRONCO—Western Insulated Wire Co.  
BRONZE-ARC—Alloy Rods Company  
Bronze Bearings, Inc., 340 N. Ave. East, Cranford,  
N. J.  
BRONZOIL—Dodge Mfg. Corp.  
Brook Motor Corp., 3555 W. Peterson Ave., Chicago  
45, Ill.  
BROOKLINE—Rose & Company, Inc., J.  
BROOKLYN—Johns-Manville  
BROOKS—Mine Safety Appliances Co.  
Brooks Lumber Co., P. O. Box 153, Bellingham,  
Washington  
Brown Company, 150 Causeway St., Boston 14, Massa-  
chusetts  
Brown Boveri Corp., 19 Rector St., New York 6,  
New York  
Brown-Brockmeyer Co., 1000 S. Smithville Rd., Dayton  
1, Ohio  
BROWN DEVIL—Ohmite Manufacturing Co.

Brown Instrument Co., see "Imneapolis-Honeywell  
Regulator Co., Industrial Div.  
Brown Wood Preserving Co., Inc., 404 Martin Brown  
Bldg., Louisville 2, Ky.  
BROWN-X—Pass & Seymour, Inc.  
BROWNING—Potter & Rayfield, Inc.  
Browning Laboratories, Inc., 756 Main St., Win-  
chester, Mass.  
Browning Mfg. Co., Maysville, Kentucky  
Brundee Co., see Parr Electric Co.  
Brunner Manufacturing Co., 1821 Broad St., Utica,  
New York  
BRUNNER-METIC—Brunner Mfg. Co.  
BRUNT—Parr Electric Co.  
Brush Above, Inc., 60-07 39th Ave., Woodside 77,  
L. I. N. Y.  
Brush Electronics Co., 3405 Perkins Ave., Cleveland  
14, Ohio  
BRUSHKING—Brushmaster Saw, Inc.  
Brushmaster Saw, Inc., 84 Emerald St., Kenne, N. H.  
Bryant Electric Co., 1421 State St. (Box D, Barnum  
Sta.), Bridgeport 2, Connecticut  
Bryant Heater Div., Affiliated Gas Equipment, Inc.,  
17825 St. Clair Ave., Cleveland 10, Ohio  
Bryant Mfg. Co., 410 N. Paulina St., Chicago 22, Ill.  
Bryant Park Electric Co., 400 W. 46 St., N. Y. 36,  
N. Y.  
BUBBLE-LITE—Noma Lites, Inc.  
BUBBLTROL—Automatic Control Co.  
Buchanan Electrical Products Corp., 237 U. S. Route  
22, Hillside, N. J.  
BUCK-BLOCK—Buchanan Electrical Products Corp.  
Buck Electrical Mfg. Co., 139 Highland Parkway,  
Roselle, N. J.  
BUCKEYE—Gar Wood Industries Inc.  
BUCKEYE—Holdenline Co.  
BUCKEYE—Youngstown Sheet and Tube Co.  
Buckingham Mfg. Co., Inc., 7-9 Travis Ave., Bingham-  
ton, New York  
BUCKLUG—Buck Electrical Mfg. Co.  
Buda Co., Div. of Allis-Chalmers Mfg. Co., 154th &  
Commercial Ave., Harvey, Ill.  
BUDGET—American Radiator & Standard Sanitary  
Corp.  
BUDGETLITE—Ainsworth Lighting Inc.  
Buffalo Forge Co., 490 Broadway, Buffalo 5, N. Y.  
Buffalo Machine Mfg. Co., 586 Tonawanda St., Buffalo  
7, N. Y.  
Buffalo Transformer Corp., 1507 Niagara St., Buffalo  
13, N. Y.  
Buffalo Weaving & Belting Co., 260 Chandler St.,  
Buffalo 7, New York  
BUEMIL—Republic Metals Co.  
BUG CHASER—Amplex Corp.  
BUGMASTER—Detjen Corp., Electrocuting Fly Screen  
Div.  
BUILDERS—Stanley Electric Tools  
BUILT-IN-WATCHMAN—Westinghouse Electric Corp.  
BULL DOG—Boston Woven Hose & Rubber Co.  
BULL DOG—Fullman Mfg. Co.  
BULL DOG—Marvel Lamp Co.  
BULLDOG—Polis Mfg. Co. J. D.  
Bulldog Electric Products Co., 7610 Jos Campau,  
Detroit 11, Michigan  
BULLS-I-UNIT—Kirkland Co., H. R.  
Bundy Recording Co., W. H., see Simplex Time  
Recorder Co.  
Bunnell & Co., J. H., 81 Prospect St., Brooklyn,  
New York  
Burns Brass & Bronze Co., 715 Spencer St., Toledo  
1, Ohio  
BURNWICH—Garvis Mfg. Co.  
Burbank Electrical Products, 215 West Palm Ave.,  
(P. O. Box 7), Burbank, California  
Burgess Battery Co., Freeport, Ill.  
Burgess Vibrocrafters, Inc., Grayslake, Ill.  
Burrill Lighting Rod Co., Park Ave. & Vine St.,  
Fremont, Ohio  
BURKEY—Electric Fish Screen Co.  
Burkhard Mfg. Corp., Div. of Burkhard Bros. Inc., 320  
Fayette St., Manlius, N. Y.  
BURKS—Decat Pump Co.  
Burling Instrument Co., Inc., 16 River Rd., Chatham,  
N. J.  
Burlington Instrument Co., Burlington, Iowa  
Burdy Engineering Company, Inc., Norwalk, Con-  
necticut  
BURNHAM—Fitz Water Wheel Co.  
Burnham Corp., Box 351, Zanesville, Ohio  
Burnley Battery & Manufacturing Co., 103 Clay St.,  
Box 511, North East, Pennsylvania  
Burns Co., James F., 705-715 Cherry St., Phila.  
6, Pa.  
Burpee Can Sealer Co., E-Z Way Tool Co. Div., 128  
W. Liberty St., Barrington, Ill.  
Burr Aluminum Products Div., see Keyes-Davis Co.  
Burt Mfg. Co., 936 S. High St., Akron 11, Ohio  
Burton, Manufacturing Co., 11201 West Pico Blvd.,  
Los Angeles 64, California  
Burton-Rogers Co., 42 Carleton St., Cambridge 42,  
Mass.  
BUSSEND—Buchanan Electrical Products Corp.  
BUSS—Bussmann Manufacturing Co.  
Bussman Mfg. Co., Div. of McGraw Electric Co., 2536  
W. University St., St. Louis 7, Mo.  
BUSTER—Liddeen, Inc., Gustav  
BUSTRICTION—Bulldog Electric Products Co.  
BUTARONE—General Cable Corp.  
BUTTIN—Burdoy Engineering Co., Inc.  
BUTTON—Eric Resistor Corp.  
BUZABEL—Edwards Company, Inc.  
BUZACALL—Edwards Company, Inc.

## C

C-A Wood Preserver Co., 6625 Delmar Blvd., St.  
Louis 5, Missouri  
CB—Anaconda Wire & Cable Co.

# COMPANY AND TRADE NAME DIRECTORY

CBS—Columbia Broadcasting System, Inc.  
 CBS-Hytron Div., Columbia Broadcasting System, Inc.,  
 100 Endicott St., Danvers, Mass.  
 C & C—McColpin-Christie Corp.  
 CCA—Columbia Company of America, Inc.  
 C-D—Cornell-Dubilier Electric Corp.  
 C & D Batteries, Inc., Conshohocken, Pennsylvania  
 CDM—Curtis Development & Mfg. Co.  
 C & E—Erisson Manufacturing Co.  
 CEC Instruments, Inc.—see Consolidated Engineering Corp.  
 C & G Wheel Puller Co., Inc., Scio, N. Y.  
 CGS—Caltron Products Co.  
 C-I BOARD—Century Lighting Inc.  
 C-LECTOR—Century Lighting Inc.  
 C. M.—Chicago Miniature Lamp Works  
 CM—Chisholm-Moore Hoist Corp.  
 CNM—Conduit Nipple Mfg. Co.  
 CP—Chicago Pneumatic Tool Co.  
 C-D-T—Chase-Shawmut Company  
 C-RITE—Dependable Electric Mfg. Co., Inc.  
 CSP—Westinghouse Electric Corp.  
 CSPB—Westinghouse Electric Corp.  
 C. T. R.—Cincinnati Time Recorder Co.  
 CTS—Chicago Telephone Supply Corp.  
 C-V—CraneVevey Corp.  
 CWC Corp.—see Crozier Machine Tool Co.  
 CABRICOID—American Electric Cable Co.  
 CABINETROL—General Electric Co., Apparatus Sales Div.  
 Cable Electric Products, Inc., 234 Daboll St., Providence 7, Rhode Island  
 Cable Spinning Equipment Co., 3100 Topeka Ave., Topeka, Kan.  
 CABLEMATIC—Wil-Son Mfg. Co.  
 CABLEX—Collier Insulated Wire Co.  
 CADET—General Cabinet Corp.  
 CADDY—Erico Products, Inc.  
 CADET—Guth Company, Edwin F.  
 CADILLAC—Clements Mfg. Co.  
 CADILLAC—Waveland Electric Co.  
 CADWELD—Erico Products, Inc.  
 CAFETERIA—White Mountain Freezer Co., Inc.  
 Calcinator Corp., 28th & Water Sts., Bay City, Mich.  
 CALCULITES—Lightolier, Inc.  
 Caldwell & Co., Inc., E. F., 101 Park Ave., New York 17, New York  
 CALIENTE—Bested Mfg. Co.  
 Calina Products Co., 5420 Paschall Ave., Phila. 43, Pa.  
 CALROD—General Electric Co., Apparatus Sales Div.  
 CALSUN BRONZE—Anaconda Wire & Cable Co.  
 CALTROL—Caltron Products Co.  
 Caltron Co.—see Caltron Products Co.  
 Caltron Products Co., 1406 South Hobart Blvd., Los Angeles 6, California  
 CAM-LOC—Lloyd Products Co.  
 Cam-Loc Div., Empire Products, Inc., 9051 Blue Ash Rd. (Box 98), Cincinnati 36, Ohio  
 Cambridge Thermionic Corp., 445 Concord Ave., Cambridge 38, Mass.  
 CAMEO—Rodale Mfg. Co., Inc.  
 Cameron Electrical Mfg. Co., Inc., 205 Main St., Ansonia, Connecticut  
 Campbell-Hausfeld Co., 1954 State Ave., Harrison, Ohio  
 Campbell Specialty Co., P. O. Box 206, Okmulgee, Okla.  
 Campbell Transformer Co.—see Campbell X-Ray Corp.  
 Campbell X-Ray Corp., 110 Cumington St., Boston 15, Mass.  
 CAMTRAN—Campbell X-Ray Corp.  
 Can Arm Corp., P. O. Box 30, Chazy, N. Y.  
 Canadian Radiom & Uranium Corp., 630 Fifth Ave., New York 20, New York  
 CANDELITE—Duro-Tek Corp.  
 CANDLE FLAME—North American Electric Lamp Co.  
 CANDYBEME—North American Electric Lamp Co.  
 Canning-Pekara, Inc., 2144 N. Wood St., Chicago 14, Ill.  
 Cannon Electric Co., 3209 Humboldt St., Los Angeles 31, California  
 CANSEAL—Cannon Electrical Co.  
 Cap Screw & Nut Co. of America, Inc., 15 Desbrosses St., N. Y. 13, N. Y.  
 CAPACILOG—Barber-Coleman Co.  
 CAPACITROL—Barber-Coleman Co.  
 CAPCO—Capitol Stage Lighting Co., Inc.  
 CAPCOLITE—Capitol Stage Lighting Co., Inc.  
 Capewell Mfg. Co., 60-70 Governor St., Hartford 2, Conn.  
 CAPILLARY—Air & Refrigeration Corp.  
 Capitol Hardware Mfg. Co., Inc., 400 N. Leavitt St., Chicago, Ill.  
 Capitol Stage Lighting Co., Inc., 527 W. 45 St., New York 36, N. Y.  
 CAPITRON—Aircraft-Marine Products, Inc.  
 CAPRI—Frigid, Inc.  
 CAPRI—Industrial Lamp Corp.  
 CAPRI—Swiveler Co., Inc.  
 Capson Mfg. Co., 2565 W. Fullerton Ave., Chicago 47, Ill.  
 CARBI-TWIST—U. S. Expansion Belt Co.  
 CARBOCOUPLE—Minneapolis-Honeywell Regulator Co.  
 Carbolinum America—see C. A. Wood Preserver Co.  
 Carbolinum Wood Preserving Co., 528 West Highland Ave., Milwaukee 3, Wisconsin  
 CARBOLON—Carbone Corp.  
 Carboloy Co., Inc.—see Carboloy Dept., General Electric Co.  
 Carboloy Dept., General Electric Co., 11172 E. Eight Mile Rd., Detroit 32, Mich.  
 CARBOLUBE—Carbone Corp.  
 CARBONITE—Continental Carbon Inc.  
 Carbon Engineering Corp., P. O. Box 236, Slinger, Wis.  
 CARBONAIR—Edison, Inc., Thomas A., Primary Battery Division  
 Carbone Corp., 400 Myrtle Ave., Bonton, New Jersey

Carborundum Co., Global Div., Niagara Falls, N. Y.  
 CARCO—Pacific Car and Foundry Co.  
 CARDAX—Electro-Voice Inc.  
 CARDINAL—Quality Tools Corp.  
 CARDYNE—Electro-Voice Inc.  
 CARENCO—Carlson Engineering Corp.  
 Carey Mfg. Co., Philip, Cincinnati 15, Ohio  
 CAREY STONE—Carey Mfg. Co., Philip  
 CAREYSOTE—Carey Mfg. Co., Philip  
 CARGO SCOUT—Elwell-Parker Electric Co.  
 Carille & Dougherty, Inc.—see C & D Batteries, Inc.  
 Carling Electric, Inc., 505 New Park Ave., West Hartford 10, Conn.  
 CARLOADER—Clark Equipment Co.  
 Carlson Products Corp., 10279 Meach Ave., Cleveland 5, Ohio  
 Carlson Co., 277 Broadway, N. Y. 7, N. Y.  
 CARLTON—Hudson Lamp Co.  
 Carney & Co., B. J., 411 Peyton Bldg., Spokane 8, Wash.  
 Carol Cable Co., 190 Middle St., Pawtucket, R. I.  
 CAROPRENE—Carol Cable Co.  
 Carpenter Manufacturing Co., 2 Bradley St., Somerville 45, Massachusetts  
 Carrick Products Co.—see National Appliance Co.  
 Carrier Corporation, 300 South Geddes St., Syracuse, New York  
 CARRO—United Pressed Products Co.  
 Carron Mfg. Co.—see United Pressed Products Co.  
 CARRY-ALL—Morrison Steel Products Inc.  
 CARRYABLE—Homelite Corp.  
 Carson Mfg. Co., Inc., 1804 E. 30 St., Indianapolis 18, Ind.  
 Carter Co., R. L.—see Stanley Electric Tools  
 Carter Motor Co., 2644 N. Maplewood Ave., Chicago 47, Ill.  
 CARTRIJ-DRY—Pyramid Electric Co.  
 Casco Products Corp., 512 Hancock Ave., Bridgeport 2, Connecticut  
 Casey Mfg. Co., Inc., 31 Lake Drive, Oshkosh, Wis.  
 CAST-ONM—Shallcross Mfg. Co.  
 Castle Hills Corp., Hartzell Propeller Fan Co. Div., S. Engle Ave., Piqua, Ohio  
 CASTOMATIC—Federated Metals Div., American Smelting & Refining Co.  
 CAT—Caterpillar Tractor Co.  
 CATALINA—Industrial Lamp Corp.  
 CATALINA—Swiveler Co., Inc.  
 Caterpillar Tractor Co., Peoria 8, Ill.  
 Catho-Lite Co., Inc., 3000 Ridgewood Ave., Baltimore 15, Md.  
 CAT'S EYE—Ess Instrument Co.  
 CAVALIER—Wakefield Co., F. W.  
 Cavalier Air Conditioning Co.—see Forston Co.  
 Cavalier Corp., Electric Heating Div., 343 W. First St., Chattanooga, Tenn.  
 CEETEECO—Crescent Tool Co.  
 CEFCO—Commercial Enclosed Fuse Co.  
 Cellheat Div., Homes Inc.—see Cellheat, Inc.  
 Cellheat, Inc., 5212 Homburg Drive, Knoxville, Tenn.  
 CELAB—Clark Electronic Corp.  
 ELECTRAY—Weston Electrical Instrument Corp.  
 Celina, Inc., North Island Ave., Batavia, Ill.  
 CELD—Ego Shutter & Mfg. Co.  
 CELORON—Continental Diamond Fibre Co.  
 CENT-TRI-CORE—Alpha Metals, Inc.  
 CENCO—Central Scientific Co.  
 CENLACO—National Supply Co.  
 CENTAWATT—Wesix Electric Heater Co.  
 CENTR-A-POWER—General Electric Co., Distribution Assemblies Dept.  
 CENTRAL BLACK—National Supply Co.  
 Central Neon Co.—see Centralite Co., Inc.  
 Central Paint & Varnish, 59 Prospect St., Brooklyn 3, N. Y.  
 Central Scientific Co., 1700 Irving Park Rd., Chicago 13, Illinois  
 Central Transformer Corp., P. O. Box 687, Pine Bluff, Arkansas  
 Centralab Div., Globe-Union Inc., 900 E. Keefe Ave., Milwaukee 1, Wis.  
 Centralite Co., Inc., 1763 Central Ave., Cincinnati 14, Ohio  
 CENTRALOID—Central Paint & Varnish Works Inc.  
 CENTURY—Electro-Voice Inc.  
 CENTURY—Kearby & Mattison Co.  
 CENTURY—Northern Electric Co.  
 Century Associates, Inc.—see Century Product Works Inc.  
 Century Electric Co., 1806 Pine St., St. Louis 3, Missouri  
 Century Fan & Ventilator Co., 45 Cedar St., Stamford, Conn.  
 Century Lighting Inc., 521 W. 43 St., New York 36, N. Y.  
 Century Product Works Inc., 503-507 W. 56 St., N. Y. 19, N. Y.  
 CERAMELEX—Erie Resistor Corp.  
 Ceramic Specialties Co.—see Lint, Clyde W.  
 CERAMICON—Erie Resistor Corp.  
 CERT-CRIMP—Aircraft-Marine Products, Inc.  
 Certified Ballast Mfrs.—see Fleur O-Lier Mfrs.  
 Certified Fleur O-Lier Mfrs.—see Fleur O-Lier Mfrs.  
 CETRON—Continental Electric Co.  
 CHABELCO—Chain Belt Co.  
 Chace Co., W. M., 1600 Beard Ave., Detroit 9, Mich.  
 Chadsey Corp., P. O. Box 1858, Hartford 1, Conn.  
 Chadsey Mfg. Co., Inc.—see Chadsey Corp.  
 Chain Belt Company, 4701 West Greenfield Ave., Milwaukee 1, Wisconsin  
 CHAINGRIP—Armstrong-Bray & Co.  
 CHALKBOARD—Solar Light Mfg. Co.  
 CHALLENGER—Sibley Mfg. Co., Inc., Edw. L.  
 CHALLENGER—American-La France-Foamite Corp.  
 CHALLENGER—Bogen Co., Inc., David  
 CHALLENGER—Chelsea Fan and Blower Co.  
 CHALLENGER—Coffing Hoist Div., Duff-Norton Co.  
 CHALLENGER—Curtis Lighting, Inc.  
 CHALLENGER—Dreier Brothers, Inc.

CHALLENGER—Signal Electric Mfg. Co.  
 CHAMP—Aircraft-Marine Products, Inc.  
 CHAMPION—Darley & Co., W. S.  
 CHAMPION—Fogel Refrigerator Co.  
 CHAMPION—Hamilton Beach Co.  
 CHAMPION—Honeycutt Mfg. Co., Inc.  
 CHAMPION—Turner Brass Works  
 CHAMPION—Winpower Mfg. Co.  
 Champion Armature Corp., 4632 Pacific Blvd., Los Angeles 58, Calif.  
 Champion Cable Co., 1805 E. 40 St., Cleveland 3, Ohio  
 Champion DeArment Tool Co., South Main St., Meadville, Pennsylvania  
 Champion Lamp Works, 330 Lynnway, Lynn, Mass.  
 Champion Mfg. Co.—see Winpower Mfg. Co.  
 Chance Co., A. B., 210 North Allen St., Centralia, Missouri  
 Chandeyson Electric Co., 4054-84 Bingham Ave., St. Louis 16, Missouri  
 CHANFL-RUN—Holdenline Company  
 CHANNELITES—Swiveler Co., Inc.  
 CHANNELLOCK—Slater Electric & Mfg. Co. Inc.  
 CHANNELLOCK—Champion DeArment Tool Co.  
 Chapin Co., Inc., Chas. E., 227 Fulton St., N. Y. 7, N. Y.  
 Chapman Chemical Co., 707 Dermon Bldg., Memphis 3, Tennessee  
 Chapman Electrical Works, Inc., P. E., 1820 Chouteau Ave., St. Louis 3, Missouri  
 CHARGO—Charleston Rubber Co.  
 CHARGALYZER—McColpin-Christie Corp.  
 CHARGE-O-MATIC—Hertner Electric Co.  
 CHARGICATOR—Hickok Electrical Instrument Co.  
 CHARGOMATIC 88—Electric Cord Co.  
 Charles Machine Works, Box 66, Perry, Okla.  
 Charleston Rubber Co., Stark Industrial Park, Charleston, S. C.  
 CHASE—Thomas & Betts Co.  
 Chase Brass & Copper Co., 236 Grand St., Waterbury 20, Connecticut  
 Chase-Shawmut Co., 374 Merrimac St., Newburyport, Massachusetts  
 Chase & Sons, Inc., Randolph, Mass.  
 CHEER LIGHT—Aerolux Lights Corp.  
 CHESTER—Knapp-Monarch Co.  
 CHELDUOGUEAR—Chelsea Elevator Co.  
 CHELGEAR—Chelsea Elevator Co.  
 CHELNOGEAR—Chelsea Elevator Co.  
 Chelsea Elevator Co., 549-551 West 52 St., New York 19, New York  
 Chelsea Fan & Blower Co., Inc., 639 South Ave., Plainfield, New Jersey  
 CHELWINDLASS—Chelsea Elevator Co.  
 Chemagnetic Corp., Safe-T-Seal Div., 132 West Vergo Ave., Burbank, California  
 CHEMELC—United States Gasket Co., Fluorocarbon Products Div.  
 CHEMISEAL—Fluorocarbon Products Div., United States Gasket Co.  
 Cheney Co., W. E., 735 N. 34 St., Milwaukee 8, Wis.  
 Cheney Hammer Corp., Henry—see Collins Co.  
 Chester Cable Corp., Oakland Ave., Chester, N. Y.  
 Chester Hoist Div., National Screw & Mfg. Co., Lisbon, Ohio  
 Chester Mfg. Co.—see Chester Hoist Div., National Screw & Mfg. Co.  
 Cheston Co., Frank C., 30 Church St., New York 7, New York  
 CHICAGO—Couch Co., Inc., S. H.  
 CHICAGO—Klein & Sons, Mathias  
 CHICAGO—Lidson, Inc., Gustave  
 CHICAGO—Madison Electric Products, Inc.  
 Chicago Belting Div., Chicago-Allis Mfg. Corp., 125 N. Green St., Chicago 7, Ill.  
 Chicago Blower Corp., 9867 Pacific Ave., Franklin Park, Illinois  
 Chicago Commutator, Inc., 325 West Ohio St., Chicago 10, Illinois  
 Chicago Decalcomania Co., 3310 Elston Ave., Chicago 18, Ill.  
 Chicago Die Casting Mfg. Co., 2510-14 W. Monroe St., Chicago 12, Ill.  
 Chicago Electric Tachometer Co.—see Madison Electric Products, Inc.  
 CHICAGO GRIP—Klein & Sons, Mathias  
 Chicago Metal Hose Corp.—see Flexonics Corp.  
 Chicago Miniature Lamp Works, 1500 N. Ogden Ave., Chicago 10, Ill.  
 Chicago Pneumatic Tool Co., 6 East 44th St., New York 17, New York  
 Chicago Raw Hide Manufacturing Co., 1301 Elston Ave., Chicago 22, Illinois  
 Chicago Rivet & Machine Co., 9600 West Jackson Blvd., Bellwood, Illinois  
 Chicago Roller Skate Co.—see Ware Fuse Corp.  
 Chicago Standard Transformer Corp., Addison & Elston, Chicago 18, Ill.  
 Chicago Transformer Corp.—see Chicago Standard Transformer Corp.  
 Chicago Transformer Div., Essex Wire Corp.—see Chicago Standard Transformer Corp.  
 Chicago Tubing & Braid Co.—see Flexonics Corp.  
 Chicago Wheel & Mfg. Co., 1101 W. Monroe St., Chicago 7, Ill.  
 Chicago Wire, Iron & Brass Works, 2411 W. Belmont Ave., Chicago 18, Ill.  
 CHIEF—Gaines-Colliers Co., Quijada Tool Div.  
 CHIEF—Stem Electric Mfg. Co.  
 CHIEFTAIN—Gibson Mfg. Co.  
 CHILCO—Chicago Miniature Lamp Works  
 CHILDS—American-LaFrance-Foamite Corp.  
 CHILL AIR—National Engineering & Mfg. Co.  
 CHILL-CHASER—Still-Man Company  
 Chisholm-Moore Hoist Corp.—see Chisholm-Moore Hoist Div., Columbus McKinnon Chain Corp.



Chisholm-Moore Hoist Div., Columbus McKinnon Chain Corp., 6072 Fremont Ave., Tonawanda, N. Y.  
 Chisholm-Ryder Co., Inc., Premax Products Div., College & Highland Aves., Niagara Falls, New York  
 CHITRAN—Chicago Standard Transformer Corp.  
 CHLOREXTOL—Allis-Chalmers Manufacturing Co.  
 CHORDETTE—Edwards Company, Inc.  
 CHRO-MOW—Crusible Steel Co. of America  
 Chron-Ever Co., 65 Kinkel St., Westbury, L. I., New York  
 CHROMALOX—Wiegand Co., Edwin L.  
 CHROMAR—Arcos Corp.  
 CHROMASOL—Ward Leonard Electric Co.  
 CHROMASTER—Ward Leonard Electric Co.  
 CHROME-X—Pass & Seymour, Inc.  
 CHROMEND—Arcos Corp.  
 CHRONO-SPRAY—Paragon Electric Co.  
 CHRONO-TEMP—Paragon Electric Co.  
 CHRONOTHERM—Minneapolis-Honeywell Regulator Co.  
 CHRYSLER AIRTEMP—Chrysler Corp., Airtemp Div.  
 Chrysler Corp., Airtemp Div., 1600 Webster St., Dayton 1, Ohio  
 Chrysler Corp., Amplex Div., P. O. Box 2718, Detroit 31, Mich.  
 CINCH—National Lead Company  
 Cincinnati Clock & Instrument Co., 1060 Hulbert St., Cincinnati 14, Ohio  
 Cincinnati Electrical Tool Co., Div. of LeBlond Machine Tool Co., Madison & Edwards Rd., Cincinnati 8, Ohio  
 Cincinnati Pump & Mfg. Co., Inc., 3182 Beckman St., Cincinnati 23, Ohio  
 Cincinnati Time Recorder Co., 1733 Central Ave., Cincinnati 14, Ohio  
 Cincinnati Tool Co., 1951 Waverly Ave., Norwood, Cincinnati 12, Ohio  
 CINKLOX—Cincinnati Clock & Instrument Co.  
 CINTEX—Magnetic Engineering & Mfg. Co.  
 Circle Light—see Hisco Electric Corp.  
 CIRCAB—Circle Wire and Cable Corp.  
 CIRCALARC—Westinghouse Electric Corp., Lamp Div.  
 Circle Air Industries Inc.—see Circle Air Products  
 Circle Air Products, Inc., 244 Herkimer St., Brooklyn 16, N. Y.  
 CIRCLE B—Bristol Motor Div., Vocaline Co. of America, Inc.  
 CIRCLE BREEZE—Seigel Co., L. J.  
 CIRCLE D—Natale Machine & Tool Co.  
 Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J.  
 CIRCLE W—Westinghouse Electric Corp.  
 Circle Wire & Cable Corp., 5500 Maspeth Ave., Maspeth, New York  
 Circle Lite Corp.—see House-O-Lite Corp.  
 CIRCLESHEATH—Circle Wire and Cable Corp.  
 CIRCLOTION—Electro-Voice Inc.  
 CIRCUMAT—United States Rubber Co.  
 CIRCULAR—Kisco Company, Inc.  
 Circulaire Div., Corlett-Turner Co., 1001 S. Kostner Ave., Chicago 24, Ill.  
 Circulators & Devices Mfg. Corp.—see Frigid, Inc.  
 CIRCLUX—Garden City Plating & Mfg. Co.  
 CIRFLEX—Circle Wire and Cable Corp.  
 CIRKLAR—Folsom Company, Inc.  
 CIRTEX—Circle Wire and Cable Corp.  
 CIRTUF—Circle Wire and Cable Corp.  
 CLAMPIPE—Mueller Electric Co.  
 Clancy Inc., J. R., 1010 Belden Ave., Syracuse, N. Y.  
 Clamage Fan Co., Kalamazoo, Mich.  
 Clare & Co., C. P., 4719 West Sunnyside Ave., Chicago 30, Illinois  
 CLAREMONT—Lightolier, Inc.  
 CLARIDGE—Lightolier, Inc.  
 CLARK—Champion Cable Co.  
 Clark Co., George P., 56 Canal St., Windsor Locks, Connecticut  
 Clark Controller Co., American Electric Switch Div., 1146 E. 152 St., Cleveland 10, Ohio  
 Clark Div., McGraw Electric Co., 5201 W. 65 St., Chicago 38, Ill.  
 Clark Door Co., Inc., 515 Hunterdon St., Newark 8, N. J.  
 Clark Electronic Corp., Pioneer Rd., Box 165, Palm Springs, Calif.  
 Clark Electronic Laboratories—see Clark Electronic Corp.  
 Clark Equipment Co., Industrial Truck Div., Battle Creek, Michigan  
 CLARKAT—Clark Equipment Co.  
 Clarke Sanding Machine Co., 30 East Clay Ave., Muskegon, Michigan  
 Clarkstan Corp.—see Pacific Transducer Corp.  
 Clarksville Foundry & Machine Works, Commerce & Spring Sts. (P. O. Box 187), Clarksville, Tenn.  
 Claus Cuiery Co., Fremont, Ohio  
 CLAW-TOOTH—DoAll Co.  
 CLEARSITE—Economy Fuse & Manufacturing Co.  
 Clement Electric Company, 223 Erie St., N. W., Grand Rapids 2, Mich.  
 Clements Mfg. Co., 6650 South Narragansett Ave., Chicago 38, Illinois  
 Clemson Bros., Inc., Middletown, New York  
 Cleveland Commutator Div., Borg-Warner Corp., Box 394, Old Mansfield Rd., Wooster, Ohio  
 Cleveland Crane & Engineering Co., Wickliffe, Ohio  
 Cleveland Electric Motor Co., 5213 Chester Ave., Cleveland 3, Ohio  
 Cleveland Foundry Co.—see Perfection Industries, Inc.  
 Cleveland Heater Co., Air Controls, Inc. Div., 2310 Superior Ave., Cleveland 14, Ohio  
 Cleveland Heater Co., Rex Electric Div., 2310 Superior Ave., Cleveland 14, Ohio  
 Cleveland Metal Products Co.—see Perfection Industries, Inc.  
 Cleveland Switchboard Co., 2925 E. 79 St., Cleveland 4, Ohio  
 Cleveland Tramrail Div.—see Cleveland Crane & Engineering Co.

Cleveland Trencher Co., 20100 St. Clair Ave., Cleveland 17, Ohio  
 Cleveland Worm & Gear Co., 3249 East 80th St., Cleveland 4, Ohio  
 CLIFTALL—Clifton Conduit Co., Inc.  
 Clifton Conduit Co., Inc., 75 Montgomery St., Jersey City 2, N. J.  
 Clifton Manufacturing Co., Inc., Mattapan, Boston 26, Massachusetts  
 CLIFTEX—Clifton Conduit Co., Inc.  
 CLIMATE CHANGER—Trane Co.  
 CLIMATE CONTROLLER—Remington Corp., Remington Air Conditioning Div.  
 CLIMATROL—Mueller Climatrol  
 CLIMAX—Glade Mfg. Co.  
 CLIP-ON—Rex Electric Mfg. Corp.  
 CLIP TITE—Superior Fuse & Mfg. Co. Inc.  
 CLIPPER—Cincinnati Time Recorder Co.  
 CLIPPER—Clark Equipment Co.  
 CLIPPER—Trade-Wind Motorfans, Inc.  
 CLIPPER—Walker Brothers  
 Clipper Manufacturing Co., 2800 Warwick, Kansas City 8, Missouri  
 CLIPITITE—Economy Fuse and Mfg. Co.  
 CLOROCOLOR—Alco Lite Corp.  
 CLOSED-BACK—U. S. Expansion Bolt Co.  
 CLOSETEER—Sun Kraft Health Products, Inc.  
 CLOSIN—Star Expansion Bolt Co.  
 CLOSTEMP—Westinghouse Electric Corp.  
 CLUSTERETTES—Benjamin Electric Mfg. Co.  
 Coates Electric Mfg. Co., 3419-11th Ave. S.W., Seattle 4, Wash.  
 COAXTUBE—Precision Tube Co., Inc.  
 COBANIC—Driver Co., Wilbur B.  
 COBENIUM—Driver Co., Wilbur B.  
 COCO—Columbia Company of America, Inc.  
 CODE-CALL—Signal Engineering & Mfg. Co.  
 Code Electric Products Corp.—see Code Products Corp.  
 Code Products Corp., 214 Kalos St., Philadelphia 28, Pennsylvania  
 COFFEE-HOT—Supreme Electric Products Co.  
 COFFEE KING—Dominion Electric Corp.  
 COFFEE TENDER—Minneapolis-Honeywell Regulator Co.  
 Coffing Hoist Co.—see Coffing Hoist Div., Duff-Norton Co.  
 Coffing Hoist Div., Duff-Norton Co., Danville, Ill.  
 COG-BELT—Dayton Rubber Co.  
 COHLASTIC—Connecticut Hard Rubber Co.  
 Coil Co. of America, Inc., 8 Washington St., Northvale, N. J.  
 COIL-FLEX—Ideal Industries, Inc.  
 COLD SEAL—Serval, Inc.  
 COLD SHELF—Barkow Mfg. Co., Inc., Aug. G.  
 COLDCOTE—Anacoda Wire & Cable Co.  
 Col & Co., Inc., C. W., 320 E. 12 St., Los Angeles 15, Calif.  
 Cole Electric Products Div., Federal Pacific Electric Co., 43-00 Crescent St., L. I. C. 1, N. Y.  
 Cole Radio Works, 86 Westville Ave., Caldwell, N. J.  
 COLLEGIAN—Industrial Lamp Corp.  
 COLLIERY KING—Boston Woven Hose & Rubber Co.  
 Collins Co., Collinsville, Conn.  
 Collier Insulated Wire Co., 249 Roosevelt Ave., Pawtucket, R. I.  
 Colonial Electric Products Inc., 1-115 Market St., East Paterson, N. J.  
 Colonial Lighting Co., Inc.—see Colonial Electric Products Inc.  
 Colonial-Premier Co., 466 West Superior St., Chicago 10, Illinois  
 COLOR BAND—Midget Heater and Specialty Co.  
 COLOR-FLOOD—Radiant Lamp Corp.  
 COLORBEAM—Amplex Corp.  
 COLORGRAPHIC—Minneapolis-Honeywell Regulator Co.  
 COLORSCOPE—Simpson Electric Co.  
 COLORTOP—Trico Fuse Manufacturing Co.  
 COLOVOLT—Poliak Luminescent Corp.  
 COLUMBIA—National Steel Construction Co., Inc.  
 COLUMBIA—Speidel Elevator Corp.  
 Columbia Broadcasting System, Inc., CBS-Hytron Div., 100 Endicott St., Danvers, Massachusetts  
 Columbia Cable & Electric Corp., 255 Chestnut St., Brooklyn 8, New York  
 Columbia Electric Mfg. Co., 4519 Hamilton Ave., Cleveland 14, Ohio  
 Columbia Electric & Manufacturing Co., North 2310 Fancher Way, Spokane, Washington  
 COLUMBIA-FLEX—Columbia Cable & Electric Corp.  
 Columbia Industries, Inc., Columbia, Pa.  
 Columbia Metal Box Co., 260 East 143 St., New York 51, New York  
 Columbia Nut & Bolt Co., Inc., 945 Main St., Bridgeport 3, Connecticut  
 COLUMBIA-QUALITY—Columbia Metal Box Co.  
 Columbia-Technical Corp., 5 E. 57 St., N. Y. 22, N. Y.  
 Columbia Vise & Mfg. Co., 9021 Bessemer Ave., Cleveland 4, Ohio  
 Columbia Wire & Supply Co., 2850 Irving Park Rd., Chicago 18, Illinois  
 Columbus McKinnon Chain Corp., Chisholm-Moore Hoist Div., 6072 Fremont Ave., Tonawanda, N. Y.  
 COM—Wing Mfg. Co., L. J.  
 COMBINE—Johnson Belting Co., Inc.  
 Combustion Control Corp.—see Electronics Corp. of America  
 COMET—Chisholm-Moore Hoist Corp.  
 COMET—Fulton Mfg. Corp.  
 COMET—Ross Operating Valve Co.  
 COMET—Standard Electric Co., Inc.  
 COMFOE—Mine Safety Appliances Co.  
 COMFORT CONTROL—A-P Controls Corp.  
 COMFORTAIRE—American Coils Co.  
 COMMAND-AIR—Commander Mfg. Co.  
 COMMAND-AIRE—Afliliated Gas Equipment, Inc., Bryant Heater Div.  
 COMMANDER—Fairbanks Co.  
 Commander Mfg. Co., 4225 W. Kinzie, Chicago 24, Ill.

COMMERCIAL—White Mountain Freezer Co., Inc.  
 Commercial Enclosed Fuse Co. of N. J., 6812 Polk St., Guttenberg, N. J.  
 Commercial Metal Products Co.—see Compco Corp.  
 Commercial Reflector & Mfg. Co., 3109 Maple Ave., Los Angeles 11, Calif.  
 COMMODORE—Wakefield Co., F. W.  
 COMMUNICALL—Sperli Faraday, Inc.  
 Communication Measurements Lab., Inc., 350 Leland Ave., Plainfield, New Jersey  
 COMMUNICATOR—Godfrey Manufacturing Co.  
 COMPACT—General Cable Corp.  
 COMPACT—Newcomb Audio Products Co.  
 Compco Corp., 2251 West St. Paul Ave., Chicago 47, Illinois  
 COMPETITION—Partrick & Wilkins Co.  
 COMPOUND LEVER—Bartlett Mfg. Co.  
 CON-LET—Goldak Co.  
 CON POR—Chicago Rawhide Mfg. Co.  
 CON-TAC-TOR—Minneapolis-Honeywell Regulator Co.  
 CONCAVEZ—Chain Belt Co.  
 CONCENTROL—Continental Electric Equipment Co.  
 CONCERT-LINE—Shure Brothers, Inc.  
 Conco Engineering Works, Mendota, Ill.  
 Concord Metal Cabinets, Inc.—see Electrovactor, Inc.  
 Concord Mica Corp., 25 Crescent St., Penacook, N. H.  
 Condi-Lite Corp., 889 Broadway, N. Y. 3, N. Y.  
 CONDIT—Allis-Chalmers Mfg. Co.  
 CONDOR—Raybestos-Manhattan, Inc.  
 CONDUCTELL—Mica Insulator Co.  
 Conduit of Columbus—see Conduit Pipe Products Co.  
 Conduit Nipple Mfg. Co., 1455 Spring Garden Ave., Pittsburgh 12, Pa.  
 Conduit Pipe Products Co., 157 West Fulton St., Columbus 16, Ohio  
 CONDULET—Crouse-Hinds Co.  
 CONDEX—Blackburn Corp., Jasper  
 Cone-Drive Gears Div., Michigan Tool Co., 7171 E. McMillan Rd., Detroit 12, Mich.  
 CONEX—Weiss & Biheller Merchandise Corp.  
 CONFETTI—Central Paint & Varnish Works, Inc.  
 CONFIDENCER—Roanwell Corp.  
 CONFLEX—Metals & Controls Corp.  
 Congress Die Casting Div.—see Congress Drives Div., Tann Corp.  
 Congress Drives Div., Tann Corp., 3750 E. Outer Drive, Detroit 34, Mich.  
 Congress Fan & Electric Co.—see Guider, Roll and Service Co.  
 Congress Tool & Die Div.—see Congress Drives Div., Tann Corp.  
 CONNECTALL—Waage Mfg. Co.  
 CONNECTICUT—Roche Co., Inc., Paul C.  
 Connecticut Electric Mfg. Co., Main St., Bantam, Conn.  
 Connecticut Hard Rubber Co., Box 1911, New Haven 9, Conn.  
 Connecticut Telephone & Electric Corp., 70 Britania St., Meriden, Connecticut  
 Connecticut Valley Mfg. Co., Centerbrook, Conn.  
 CONSERVO—Hewitt-Robins, Inc.  
 CONSOLAIRE—Remington Corp., Remington Air Conditioning Div.  
 CONSOLIDATED—Manning, Maxwell & Moore, Inc.  
 Consolidated Engineering Corp., 300 North Sierra Madre Villa, Pasadena 15, California  
 Consolidated Safety Valve Co.—see Manning, Maxwell & Moore, Inc.  
 Consolidated Vacuum Corp.—see Consolidated Engineering Corp.  
 CONSTELLATION—Lighting Products, Inc.  
 CONSTELLATION—Trindl Products, Ltd.  
 Contact, Inc., Box 244, Maynard, Mass.  
 CONTEMPO—General Lamp Mfg. Corp.  
 CONTINENTAL—Globe Lighting Products, Inc.  
 CONTINENTAL—National Steel Construction Co., Inc.  
 Continental Battery Mfg. Corp., 1914 South Central Expressway, Dallas 1, Texas  
 Continental Carbon, Inc., 13900 Lorain Ave., Cleveland 11, Ohio  
 Continental Copper and Steel Industries, Inc., Hatfield Wire and Cable Div., 487 Hillside Ave., Hillside 5, N. J.  
 Continental Diamond Fibre Co., Newark, Delaware  
 Continental Electric Co., Geneva, Ill.  
 Continental Electric Co., 1234 S. Prairie Ave., P. O. Box 89, Hawthorne, Calif.  
 Continental Electric Co., Inc., 325 Ferry St., Newark 5, New Jersey  
 Continental Electric Equipment Co., Box 1055, Cincinnati, Ohio  
 Continental Radiant Glass Heating Corp., 1 East 35 St., New York 16, New York  
 Continental Wire Corp., York, Pa.  
 CONTOURMATIC—DoAll Co.  
 CONTRA-TORQUE—Electric Controller & Mfg. Co.  
 Control Systems, Inc., 1788 Stillwell Ave., Brooklyn 23, N. Y.  
 CONTROLAR—Vickers Electric Div., Vickers, Inc.  
 CONTROLS—Holograph Company, Inc.  
 CONTROLLER—General Lighting Products Co.  
 CONTROLITE—Line Material Co.  
 CONTROLMAX—Sangamo Electric Company  
 Convaire, Inc., P. O. Box 9671, Pittsburgh 16, Pa.  
 CONVALCO—Connecticut Valley Mfg. Co.  
 CONVERS-O-CALL—Adcrafters Co.  
 CONVERS-O-CALL—National Inter-Communication Systems, Inc.  
 CONVERT-TO-COOL—Typhoon Air Conditioning Co., Inc.  
 CONVERTI-FUSE—General Electric Co., Distribution Assemblies Dept.  
 CONVOTROL—Automatic Electric Co.  
 COOK-N-FRYER—Westinghouse Elec. Corp., Appliance Div.  
 Cook's Sons, Inc., Adam, 5 N. Stiles St., Linden, N. J.  
 Cool-Amp Co., 8603 W. 17 Ave., Portland 19, Ore



## COMPANY AND TRADE NAME DIRECTORY

COOL-CIRCLE-ATOR—Kisco Company, Inc.  
Cool-ets, Inc., 20080 James Couzens Highway, Detroit 35, Mich.  
COOL-R-HUT—Arvin Industries, Inc.  
COOL-SPOT—Signal Electric Mfg. Co.  
COOL STREAM—Karen Corp.  
COOLAIR—American Coolair Corp.  
Cooler-Aire, Div. of Glass Gorkum Co., 4845 N. Elston Ave., Chicago 30, Ill.  
Coolerators Co., Div. of International Telephone & Telegraph Corp., P. O. Box 399, Duluth, Minn.  
COOLERO—Hirschman-Pohle Co., Inc.  
COOLITE—Friedrich Refrigerators, Inc.  
COOLITE—Swivelair Co., Inc.  
COOLTONG—Lincoln Electric Co.  
Cooper Company, D. C., 1467 South Michigan Ave., Chicago 5, Illinois  
Cooper Co., Inc., Clark, 317 N. Market St., Palmyra, N. J.  
Cooper Hewitt Electric Co., Div. of Spertl Faraday, Inc., 720-732 Grand St., Hoboken, N. J.  
COPACO—Cottrell Paper Co., Inc.  
COPALAM—Cottrell Paper Co., Inc.  
Co-operative Industries, Inc., 100 Oakdale Rd., Chester, N. J.  
Co-operative Utilities Co., Inc., Subsidiary of Calebough Self Lubricating Carbon Co., Inc., 4637-39 Mulberry St., Phila. 24, Pa.  
COP-CAP—Buck Electrical Mfg. Co.  
COPACO—Cottrell Paper Co., Inc.  
COPALAM—Cottrell Paper Co., Inc.  
Cape, Inc., T. J., 711 South 50th St., Philadelphia 43, Pennsylvania  
Capehart Refrigeration Corp., Clinton St., Sidney, Ohio  
Copper Boiler & Heater Works, 522 Jay St., Manitowish, Wisconsin  
COPPERPLY—National-Standard Co.  
COPPERTONE—Globe Lighting Products, Inc.  
Copperweld Steel Co., Wire and Cable Div., Glassport, Pa.  
Coppus Blue Ribbon Products—see Coppus Engineering Corp.  
Coppus Engineering Corp., 344 Park Ave., Worcester 2, Massachusetts  
COPROX—Bradley Laboratories, Inc.  
COPYMASTER—Peck & Harvey Mfg. Corp.  
CORAL DESIGN—Dietz Co., Henry G.  
Cordley & Hayes, 443 Fourth Ave., N. Y. 16, N. Y.  
Cordomatic Div., Vacuum Cleaner Corp. of America, 1724 W. Indiana Ave., Phila. 32, Pa.  
CORE-VENT—Super Tool Co.  
Cortlett-Turner Co., Circulastair Div., 1001 S. Kostner Ave., Chicago 24, Ill.  
Cornell-Dubilier Electric Corp., 333 Hamilton Blvd., South Plainfield, New Jersey  
Corning Glass Works, Corning, New York  
Cornish Wire Co., Inc., 50 Church St., New York 7, New York  
Cornwall Fixture Corp.—see Lighton of Cornwall  
CORONA—Verson Company, Kurt  
Corona Equipment Co., Inc., 5210 San Fernando Rd., Glendale 3, Calif.  
Corona Mfg. Corp.—see Corona Equipment Co., Inc.  
CORONADA—Beam Mfg. Co.  
CORONET—Curtis Lighting, Inc.  
CORONOL—General Electric Co., Construction Materials Div.  
COROPRENE—Cornish Wire Co., Inc.  
CORPREX—Cornish Wire Co., Inc.  
COROX—Westinghouse Electric Corp.  
CORRECTALITE—Holograph Company, Inc.  
CORRIB—Ohmite Manufacturing Co.  
CORSAIR—Scranton Battery Corp.  
Cory Corp., Fresh-Aire Div., 221 N. LaSalle St., Chicago, Ill.  
COSMOPOLITAN—Welch Co., W. W.  
Cottrell Paper Co., Inc., 88 Purchase St., Fall River, Mass.  
Couch Company, Inc., S. H., 3 Arlington St., North Quincy 71, Massachusetts  
COUCH-CALL—Couch Co., Inc., S. H.  
Couch Ordnance Div.—see Couch Co., Inc., S. H.  
Counter & Control Corp., 5225 West Electric Ave., Milwaukee 14, Wisconsin  
COUNTER MATE—Wells Mfg. Co.  
COVERLITE—Stebber Manufacturing Co.  
COZY GLOW—Westinghouse Electric Corp.  
COZY-LITE—Swivellier Co., Inc.  
CRABLOK—Burdry Engineering Company, Inc.  
CRAFTLITE—Paramount Industries, Inc.  
CRAFTSMAN—Stahl Metal Products, Inc.  
Cramer Co., Inc., R. W., Main St., Centerbrook, Connecticut  
Crane Co., H. W., 15 N. 9th Ave., Maywood, Ill.  
Crane Packing Co., 1800 Cayler Ave., Chicago 13, Illinois  
CraneVeyor, 1240 S. Boyle Ave., Los Angeles 23, Calif.  
CREAM STRIPPER—Ellanor Chemical Co.  
CREARY—Power Power Tool Corp.  
Crescent Insulated Wire & Cable Co., 319 North Olden Ave., Trenton 5, New Jersey  
Crescent Tool Co., 200 Harrison St., Jamestown 4, N. Y.  
CRESCORD—Crescent Insulated Wire & Cable Co.  
CRESFLEX—Crescent Insulated Wire & Cable Co.  
CRESTOLOY—Crescent Tool Co.  
CRESTON MODERNIZER—Puritan Lighting Fixture Co.  
CRIMPIT—Burdry Engineering Company, Inc.  
Crise Controls Div., Acro Mfg. Co., 2040 E. Main St., Columbus 16, Ohio  
Crittenden Transformer Works, 1220 Nadeau St., Los Angeles 1, Calif.  
Crocker-Wheeler Div., Elliott Co., Ampere, N. J.  
Crocker-Wheeler Electric Mfg. Co.—see Crocker-Wheeler Div., Elliott Co.  
Croissant Machine Works, Inc., 504 Mt. Laurel Ave., Temple, Pa.  
CROLITE—Crowley Co., Inc., Henry L.

CROMAG—Crowley Co., Inc., Henry L.  
CROMALOY—Linde Air Products Co.  
CROMMASTER—Lennox Furnace Co.  
CROSBY—American Hoist and Derrick Co.  
Crouse-Hinds Co., Syracuse 1, N. Y.  
Crowell Tube Co., Inc., 177 Bedford St., Lexington 73, Mass.  
Crown Controls Co., Inc., 40-44 S. Washington St., New Bremen, Ohio  
Crown Industrial Products Co., 713 Amsterdam St., Woodstock, Ill.  
Crozler Machine Tool Co., 684 N. Prairie Ave., Hawthorne, Calif.  
Crucible Steel Co. of America, P. O. Box 88, Henry W. Oliver Bldg., Pittsburgh 30, Pa.  
CRUSADER—Holdenline Co.  
CRYSTAL—Royal Electric Co., Inc.  
CRYSTAL ARIEL—Lightoller, Inc.  
Crystal Mart, Inc., 31 E. 27 St., New York 16, N. Y.  
CRYSTAL VALVE—Electric Service Mfg. Co.  
Crystalheat Co., P. O. Box 2275, Van Nuys, Calif.  
CRYSTALRAY—Crystalheat Co.  
CRYSTALUX—Westinghouse Electric Corp., Lighting Div.  
CRYSTOLON—Norton Company  
CUB—Standard Transmission Equipment Co.  
CUMBERLAND—Central Paint & Varnish Works, Inc.  
Cummins-Chicago Corp.—see Cummins Portable Tool Div., John Oster Mfg. Co.  
Cummins Portable Tool Div., John Oster Mfg. Co., 5055 N. Lydell Ave., Milwaukee 17, Wis.  
Cummins Portable Tools—see Cummins Portable Tool Div., John Oster Mfg. Co.  
CUPRON—Driver Co., Wilbur B.  
CURTAIN OF LIGHT—Electronic Control Corp.  
Curtis Development & Mfg. Co., 3244 N. 33 St., Milwaukee 16, Wis.  
Curtis Lighting, Inc., 6135 West 65th St., Chicago 38, Ill.  
Curtis Mfg. Co., Curtis Refrigeration Div., St. Louis 20, Mo.  
CURTISTRIP—Curtis Lighting, Inc.  
CURVACORE—Allis-Chalmers Mfg. Co.  
CURVEBACK—Delta-Star Electric Div., H. K. Porter Co., Inc.  
CUSH-N-BLO—Ideal Industries, Inc.  
CUSTOM—Remington Corp., Remington Air Conditioning Div.  
CUSTOM-AIR—Trane Company  
CUTAWL—International Register Co.  
Cutler-Hammer, Inc., 228 North 12 St., Milwaukee 1, Wisconsin  
Cutler Light Mfg. Co., 2026 N. 22 St., Phila. 21, Pa.  
CYBER MOTIVE—Dalmator Co.  
CYCLO-CORE—New England Carbide Tool Co., Inc.  
Cyclo-Free Corp., 6318 Cambridge, Minneapolis 16, Minn.  
CYCLO-MONITOR—Counter & Control Corp.  
CYCLO-TWIST—New England Carbide Tool Co., Inc.  
CYCLOHM—Howard Industries, Inc.  
Cyclotron Motor Corp.—see Howard Industries, Inc.  
CYCLONE—Chisholm-Moore Hoist Div., Columbus McKinnon Chain Corp.  
CYCLOPS—Boston Woven Hose & Rubber Co.  
CYCLOPS—Roller Bearing Company of America  
CYLENT—Brook Motor Corp.

## D

D.H.D.—Diamond Expansion Bolt Co., Inc.  
D/L—Derrick Light & Equipment Co.  
DTX—Diamond Wire & Cable Co.  
DV Welding Controls, 3959 Piedmont Ave., Oakland 11, Calif.  
DA-NITE—Chisholm-Ryder Co., Inc., Premax Products Div.  
DA-NIGHT—Minneapolis-Honeywell Regulator Co.  
DAGLAS—Phelps Dodge Copper Products Corp.  
Dale Engine Co., 633 Monroe St., Grand Haven, Mich.  
Dale Products, Inc., P. O. Box 1, Columbus, Nebraska  
Dalmator Co., 1375 Clay St., Santa Clara, Calif.  
Dalmotron Co., 534 Laurel St., San Carlos, Calif.  
DALOHM—Dale Products, Inc.  
Dalton Electric Heating Co., 11 Goodhue St., Salem, Massachusetts  
DAMASCUS—Boston Woven Hose & Rubber Co.  
DAMCO—Murray Co., Inc., D. A.  
Dana Fan & Blower Corp., 3501 Colerain Ave., Cincinnati, Ohio  
DARAY—Lightoller, Inc.  
Darley & Co., W. S., 2810 Washington Blvd., Chicago 12, Illinois  
DAVENPORT—Magnetic Engineering & Mfg. Co.  
DAVEY—Vibroscope Co.  
David's Gloves, Inc., 21 W. Pleasant St., Springfield, Ohio  
Davidson Fan Co., 213 California St., Newton 58, Mass.  
Davis & Co., Dean W.—see Dormeyer Industries  
Davis-Paradise Watchmen's Clock Corp.—see Detex Watchclock Corp.  
Davis Regulator Co., 2541 S. Washtenaw Ave., Chicago 8, Ill.  
Day-Brite Lighting, Inc., 5411 Bulwer Ave., St. Louis 7, Missouri  
DAY-LINE—Day-Brite Lighting, Inc.  
Day-Ray Products, Inc., 1133 Mission St., South Pasadena, California  
Dayton Electric Mfg. Co., 126 S. Oakley Blvd., Chicago 12, Ill.  
Dayton Precision Mfg. Co., 213 Beckel St., Dayton 3, Ohio  
Dayton Pump & Manufacturing Co., 500 North Webster St., Dayton 1, Ohio  
Dayton Rubber Co., P. O. Box 1004, Dayton 1, Ohio  
Dayton Safety Ladder Co., 2337 Gilbert Ave., Cincinnati 6, Ohio  
Dazor Mfg. Corp., 4481-87 Duncan Ave., St. Louis 10, Mo.  
DE-FROST—Automatic Controls Corp.  
DE-FROST-IT—Paragon Electric Company  
DE-ION—Westinghouse Electric Corp.  
DE-LUXE—Chisholm-Ryder Co., Inc., Premax Products Div.  
DE-STAT CLOTH—Globe Laboratories  
DEAN—Solar Light Mfg. Co.  
Dean Hill Pump Co., Inc., 4000 East 16 St., Indianapolis 7, Indiana  
DEARBORN AIRE—Dearborne Stove Co.  
Dearborn Stove Co., 1700 W. Commerce St., Dallas 2, Tex.  
DEBONAIRE—Westinghouse Elec. Corp., Appliance Div.  
DeBotheat Fans Div., American Machines & Metals, Inc., East Moline, Ill.  
DECAL—Chicago Decalcomania Co.  
Decatur Pump Co., 2750 Nelson Park Rd., Decatur 70, Illinois  
Decter, Inc., William—see Royaline Preferred Lighting Corp.  
Dee Electric Co., 1101 N. Paulina St., Chicago 22, Ill.  
DEEP CLEAN—Scovill Manufacturing Co. Hamilton Beach Co. Div.  
Deepfreeze Appliance Div., Motor Products Corp., 2301 Davis St., North Chicago, Ill.  
Deering Air Conditioning Co., 1069 Celestial Ave., Cincinnati 2, Ohio  
DEFENSE LIGHT—Electric Cord Co.  
DEKORIM—Moore & Co., Samuel  
DEKORON—Republic Steel Corp., Steel & Tubes Div.  
Dekoron Tubing Div., Samuel Moore and Co., Main & Orchard Sts., Mantua, Ohio  
DELCO DAYTON—General Motors Corp., Delco Products Div.  
Delco Products Div., General Motors Corp., 330 E. First St., Dayton 1, Ohio  
Delta-Star Electric Div., H. K. Porter Co., Inc., 2437 Fulton St., Chicago 12, Ill.  
DELTABESTON—General Electric Co., Construction Materials Div.  
DELTAMAX—Arnold Engineering Co.  
DEMCO—Dayton Electric Mfg. Co.  
Deming Company, South Broadway, Salem, Ohio  
Demo Tool Corp., 6735 Melrose Ave., Los Angeles, Calif.  
DEMON—DeAll Co.  
Dempster Mill Mfg. Co., 711 South Sixth St., Beatrice, Nebraska  
Den El Equipment Co.—see Electric Cord Company  
DENEL—Electric Cord Co.  
Denison Engineering Co., 1160 Dublin Rd., Columbus 16, Ohio  
Denman Products Co., 210 Bietz Bldg., Ravenna, Ohio  
DENSHEATH—Anaconda Wire & Cable Co.  
DEODOR-LITE—Sanitron, Inc.  
DEPENDA-BOND—Wall Mfg. Co., P.  
Dependable Electric Mfg. Co., 18 Johnson Ave., Brooklyn 6, N. Y.  
DERBY—Day-Brite Lighting, Inc.  
Derrick Light & Equipment Co., Div. of Jon R. Long, 1201 E. Daggett (P. O. Box 414), Fort Worth, Tex.  
Desmond-Stephan Mfg. Co., 317 S. Walnut St., Urbana, Ohio  
DESPARD—Pass & Seymour, Inc.  
Despatch Oven Company, 619 Southeast Eighth St., Minneapolis 14, Minnesota  
DETECT-A-FIRE—Femal, Inc.  
DETECT-A-FL—Femal, Inc.  
DETERMOMH—Ohmite Manufacturing Co.  
Detex Watchclock Corp., 76 Varick St., N. Y. 13, N. Y.  
Detjen Corp., Electrocutting Fly Screen Div., Freedom Plains, Pleasant Valley, N. Y.  
Detjen Electric Fly Screen Co.—see Detjen Corp.  
Detroit Elevator Co., 1938 Franklin St., Detroit 7, Mich.  
Detroit Harvester Co., Pioneer Pump Div., 14300 Tireman Ave., Detroit 28, Mich.  
Detroit Hoist & Machine Co., 8292 Morrow St., Detroit 11, Michigan  
Detroit Industrial Products Co., Gardner Products Co. Div., 15244 Aubrey, Detroit 23, Mich.  
DEUMO—Montgomery Tool Co.  
DEUTA—Montgomery Tool Co.  
DeVilbiss Co., 300 Phillips Ave., Toledo 1, Ohio  
DeWalt, Inc., Fountain Ave., Lancaster, Pennsylvania  
DEXANGLE—Acme Steel Co.  
DEXION—Acme Steel Co.  
DEXTER—Beam Manufacturing Co.  
DEXTRA-LITE—Swivellier Co., Inc.  
DI-CARO—O'Neill-Irwin Mfg. Co.  
DI-EN-KEY—Diamond Expansion Bolt Co., Inc.  
DI-FORGE—Diamond Expansion Bolt Co., Inc.  
DI-LIFT—Montgomery Tool Co.  
DI-MOL—Disston & Sons, Inc., Henry  
DI-STAMP—Diamond Expansion Bolt Co., Inc.  
DI-STOCK—Klein & Sons, Mathias  
DIA-BRATIVE—Meyers Co., W. F.  
DIACITOR—General Electric Co., Apparatus Sales Div.  
DIAL-A-SPEED—Brown-Brockmeyer Co.  
DIALTEMP—Electrigras Corp.  
DIAMALLOY—Diamond Calk Horseshoe Co.  
DIAMIDE—Diamond Expansion Bolt Co., Inc.  
DIAMOND—Continental-Diamond Fibre Co.  
Diamond Calk Horseshoe Co., 4702 Grand Ave., Duluth 7, Minnesota  
Diamond Chain Co., Inc., 402 Kentucky Ave., Indianapolis, Indiana  
DIAMOND-D—Co-Operative Utilities Co., Inc.  
DIAMOND D—Dodge Mfg. Corp.  
Diamond Expansion Bolt Co., Inc., Garwood, New Jersey  
DIAMOND F—Frankette Co., Federal Lighting Div.  
DIAMOND-G—Green, Inc., R. H.  
DIAMOND GRIP—Aircraft-Marine Products, Inc.  
DIAMOND-H—Hart Manufacturing Co.

Diamond Power Specialty Corp., P. O. Box 415, Lancaster, Ohio  
 Diamond Saw & Stamping Works—see Diamond Saw Works, Inc.  
 Diamond Saw Works, Inc., 260 Court St., Buffalo 2, New York  
 DIAMOND SEAL—Jenkins Brothers, Rubber Div.  
 Diamond Wire & Cable Co., 445 Park Ave., Sycamore, Ill.  
 DIATRON—Consolidated Engineering Corp.  
 Dick Co., J. W., Englewood, N. J.  
 Dick Co., Inc., R. & J., Sade St., Passaic, New Jersey  
 DICKBELT—Dick Co., Inc., R. & J.  
 Dicke Tool Co., 1201 Warren Ave., Downers Grove, Ill.  
 Dickey-Gabler Co., 10302 Madison Ave., Cleveland 2, Ohio  
 DICKROPE—Dick Co., Inc., R. & J.  
 Dictograph Products, Inc., 95-25 149th St., Jamaica 35, N. Y.  
 Diebold Safe & Lock Co.—see McClintock Div., O. B., Diebold, Inc.  
 DIECK—Bodendieck Tool Co.  
 DIFLEX—Suffex Corp.  
 Diehl Manufacturing Co., 1187 Findern Ave., Somerville, New Jersey  
 DIEHL—Everett, Inc., E. A.  
 Dietz Co., Henry G., 12-16 Astoria Blvd., Long Island City 2, N. Y.  
 DIFFUSO—Appleton Electric Co.  
 DIFUSOLIER—Tanglefoot Co.  
 DIGILOG—Librascope, Inc.  
 DILEC—National Electric Products Corp.  
 DILECTO—Continental-Diamond Fibre Co.  
 DILL—Trilon, Inc.  
 Dillin Corp., Frank W., 2525 S. Grand Ave., Los Angeles 7, Calif.  
 Dillin Organization—see Dillin Corp., Frank W.  
 Dillon & Co., Inc., W. C., 14620 Keswick St., Van Nuys, California  
 Dimco-Gray Company, 207 East Sixth St., Dayton 2, Ohio  
 DINABRAKE—Standard Dayton Corp., Standard Electric Div.  
 Dings Brakes, Inc., 4740 W. Electric Ave., Milwaukee 46, Wis.  
 Dings Magnetic Separator Co., 4740 West Electric Ave., Milwaukee 46, Wisconsin  
 DIP-PAK—Fidelity Chemical Products Corp.  
 DIRECT-A-CALL—Connecticut Telephone & Electric Corp.  
 DIRECTOLITE—Line Material Co.  
 DIRECTORAY—Saiton Manufacturing Co., Inc.  
 DIRECTORITE—Duro-Test Corp.  
 DISCUS—Curtis Lighting, Inc.  
 DISH-O-MAT—Jackson Products Co.  
 DISINFECTAIRE—Art Metal Co.  
 DISKONECT—Appleton Electric Co.  
 DISPLAYOLITE—Ruby-Philite Corp.  
 DISPOSALL—General Electric Company, Major Appliance Div.  
 Disston & Sons, Inc., Henry, Unruh & Milner Streets, Tacony, Philadelphia 35, Pa.  
 DITCH-WITCH—Charles Machine Works  
 DIVCO—Division Lead Company  
 DIVIDOHM—Ohmrite Manufacturing Co.  
 Division Lead Company, 7742 West 61 Place, Summit, Illinois  
 DIXIE—Garris Mfg. Co.  
 Dixie Controls Co., Box 7013, Norfolk 9, Va.  
 Dixie Logging Tool Co., Chattanooga, Tenn.  
 DIXIE MAID—Southern Electric Products  
 Dixie Radiant Glassheat Co.—see Dixie Radiant Electric Heat Corp.  
 DIXIE RAY—Dixie Radiant Electric Heat Corp.  
 Dixie Radiant Electric Heat Corp., 66 Eleventh St. N.E., Atlanta 5, Ga.  
 DO-ALL—Cable Electric Products, Inc.  
 DO-ALL—Radio City Products Co., Inc.  
 DO-ALL—Wodack Electric Tool Corp.  
 Doall Company, 254 North Laurel Ave., Des Plaines, Illinois  
 DO-IT SHOP—Cummings Portable Tool Div., John Oster Mfg. Co.  
 DOC—All-State Welding Alloys Co., Inc.  
 Dockson Corp., 3839 Wabash Ave., Detroit 8, Michigan  
 Dodge Mfg. Corp., 1944 S. William St., Mishawaka, Ind.  
 Doelcam Corp.—see Doelcam Div., Minneapolis-Honeywell Regulator Co.  
 Doelcam Div., Minneapolis-Honeywell Regulator Co., 1400 Soldiers Field Rd., Boston 35, Mass.  
 Dolcote—Dolph Co., John C.  
 DOLFLEX—Dolph Co., John C.  
 Dolph Co., John C., Monmouth Junction, N. J.  
 DOLPHON—Dolph Co., John C.  
 DOLPHSEAL—Dolph Co., John C.  
 DOLPHSPRAY—Dolph Co., John C.  
 DOME ALZAK—Guth Co., Edwin F.  
 DOMESTIC—White Mountain Freezer Co., Inc.  
 Dominion Electric Corp., 150 Elm St., Mansfield, Ohio  
 Dongan Electric Mfg. Co., 2967-3001 Franklin St., Detroit 7, Mich.  
 Donley Brothers Co., 13938 Miles Ave., Cleveland 5, Ohio  
 DONUT—Associated Research, Inc.  
 DONWOOD—Sierra Electric Corp.  
 Doors & Operators, Inc.—see Quincy Mfg. Co.  
 Dor-O-Matic Div., Republic Industries, Inc., 4446 N. Knox Ave., Chicago 30, Ill.  
 Dorby Company, Room 1106-A Merchandise Mart, Chicago 54, Illinois  
 Dormeyer Industries, 3418 Milwaukee Ave., Chicago 41, Illinois  
 Dorsey Co., John E., 80 K St., Boston 27, Mass.  
 DOS-LUG—Dossert Mfg. Corp.  
 DOSLOY—Dossert Mfg. Corp.  
 Dossert Mfg. Corp., 249-255 Huren St., Brooklyn 22, N. Y.  
 DOSSON—Dossert Mfg. Corp.

DOSTEX—Dessert Mfg. Corp.  
 DOSULON—Dessert Mfg. Corp.  
 DOUBLE DIAMOND—H-B Instrument Co.  
 DOUBLE-ENGINEERED—Metallectrics, Inc.  
 DOUBENCLOSED—U. S. Electrical Motors, Inc.  
 DOUBLETON—Allis-Chalmers Mfg. Co.  
 Dow Corning Corp., P. O. Box 592, Midland, Mich.  
 DOWNLITE—Rambusch Decorating Co.  
 Doyle Company, J. E., 1220 West Sixth St., Cleveland 15, Ohio  
 Doyle Electric Dryer Co.—see Doyle Co., J. E.  
 Doyle Vacuum Cleaner Co., 225 Stevens St., S. W., Grand Rapids 2, Michigan  
 Drachenburg Products Mfg. Co., 23600 Harper Ave., St. Claire Shore, Macomb County, Michigan  
 DRACO—Versen Company, Kurt  
 DRACO-CU—Versen Company, Kurt  
 DRAINALATOR—Ambory Corp.  
 DRAINALITE—Century Lighting Inc.  
 DREADNAUGHT—Gould-National Batteries, Inc.  
 DREADNAUGHT—Metalcraft Products Co., Inc.  
 DREADNAUGHT—Paranite Wire & Cable Div., Essex Wire Corp.  
 DREADNAUGHT—Wall Manufacturing Co., P.  
 DREADNOUGHT—Krauter & Co., Inc.  
 Dreier Brothers, Inc., 5642 Lake Park Ave., Chicago 37, Ill.  
 DREXEL—Keystone Electric Mfg. Co.  
 DRI-FILM—General Electric Co., Chemical & Metallurgical Div.  
 DRI-ALR—New Jersey Meter Co.  
 Drilex Tools, Inc., 622 E. Jericho Tpke., Huntington Station, N. Y.  
 DRILL-OM-ETER—New Jersey Meter Co.  
 DRITHERM—North American Electric Lamp Co.  
 DRIVE-ALL—Hunter Sales Co., Inc., R. M.  
 DRIVERPOINT—Hubbard & Co.  
 DRIVE-IT—Powder Power Tool Corp.  
 Driver Co., Wilbur B., 150 Riverside Ave., Newark 4, N. J.  
 Driver-Harris Company, 201 Middlesex St., Harrison, New Jersey  
 DRY-EX—Acme Industries, Inc.  
 DRY KOOL—United Refrigerator Co.  
 Dry-R-X Company, 5521 Code Ave., Minneapolis 10, Minnesota  
 Dryden Rubber Co.—see Dryden Rubber Div., Sheller Mfg. Corp.  
 Dryden Rubber Div., Sheller Mfg. Corp., 1014 S. Kildare Ave., Chicago 24, Ill.  
 DRYERETTE—Hoyt Manufacturing Corp.  
 Dryomatic Corp., 812 North Fairfax St., Alexandria, Virginia  
 DRYVIM—Star Expansion Bolt Co.  
 Du-Co Ceramics Co., Main St. Extension (Box 144), Saxenburg, Pa.  
 DU-OP—General Control Co.  
 DUA-LITE—Curtis Lighting, Inc.  
 DUAFUEL—Nordberg Mfg. Co.  
 DUAL GRIP—Weaver Co., J. A.  
 DUAL HEAT—Jensen Specialties, Inc.  
 DUAL MITE—Mechanical Industries Production Co.  
 DUAL TEMP—Admiral Corp.  
 DUALARC—Electric Arc, Inc.  
 DUALCOTE—Walker Brothers  
 DUALITER—Duro-Test Corp.  
 DUALTRONIC—Goldack Co.  
 DuBois Electric Storage Battery Co., 500 W. DuBois Ave., DuBois, Pa.  
 DUCKWORTH—Chain Belt Co.  
 DUCODUCT—Insulated Duct & Cable Co.  
 DUCT—Elgo Shutter & Mfg. Co.  
 DUCTSTAT—Minneapolis-Honeywell Regulator Co.  
 Duff-Norton Co., 2709 Preble Ave. (P. O. Box 1889), Pittsburgh 30, Pa.  
 DuKane Corp., 200 North 11th, St. Charles, Illinois  
 DULAYER—United Wire & Supply Corp.  
 DuMont Laboratories, Inc., Allen B., 760 Bloomfield Ave., Clifton, New Jersey  
 Dumore Co., 1300 17th St., Racine, Wis.  
 DUNCAN—Rogers Electric Laboratories, Inc.  
 Duncan & Bayley Div.—see General Riveters, Inc., Electro-Mechanical Div.  
 Duncan Electric Mfg. Co., Lafayette, Indiana  
 DUNCO—Struthers-Dunn, Inc.  
 Dunham Co., C. A., 400 W. Madison St., Chicago 6, Ill.  
 Duntun Co., M. W., 7 Goff St., Providence 1, Rhode Island  
 DUO—Roche Co., Inc., Paul C.  
 DUO-DRI—Hoyt Manufacturing Corp.  
 DUO-FRAME—Day-Brite Lighting, Inc.  
 DUO GUARD—BuildDog Electric Products Co.  
 DUO-LUX—Westinghouse Electric Corp., Lighting Div.  
 DUO SERVICE—Benjamin Electric Mfg. Co.  
 DUOCARB—Driver Co., Wilbur B.  
 DUOLET—Millerbernd Mfg. Co.  
 DUOTROL—Automatic Control Co.  
 DUPLEX—New Jersey Fire Alarm Co., Inc.  
 DUPLEX—Thompson & Son Co., Henry G.  
 DUPLICAN—Canadian Radium & Uranium Corp.  
 DUPY—INET, Inc.  
 DURA GRIP—Anderson Brass Works, Inc.  
 DURA LUG—Anderson Brass Works, Inc.  
 Dura Steel Products Co., 1774 E. 21 St., Los Angeles 58, Calif.  
 DURA-TIP—Hunter Sales Co., Inc., R. N.  
 DURABILT—Waring Products Corp.  
 DURABLE—Saeger Carbon Co.  
 DURAC—H-B Instrument Co.  
 DURACODE—Anaconda Wire & Cable Co.  
 DURACORD—Anaconda Wire & Cable Co.  
 DURAFLEX—Co-operative Industries, Inc.  
 DURAFLEX—Disston & Sons, Inc., Henry  
 DURAGARDE—Pyrene Manufacturing Co.  
 DURAGAUGE—Manning, Maxwell & Moore, Inc.

DURALEER—Dury Fluorescent Mfg. Co.  
 DURALINE—Anaconda Wire & Cable Co.  
 Durant Mfg. Co., 1981 N. Buffum St., Milwaukee, Wis.  
 DURAPRENE—Anaconda Wire & Cable Co.  
 DURASEAL—Anaconda Wire & Cable Co.  
 DURASHEATH—Anaconda Wire & Cable Co.  
 DURATOR—Tobe Deutschmann Corp.  
 DURAX—Minneapolis-Honeywell Regulator Co.  
 Dury Fluorescent Mfg. Co., 3318 W. Montrose Ave., Chicago 15, Ill.  
 DUREX—Duro-Test Corp.  
 DURO—Multi-Products Manufacturing Co.  
 DURO—Rogers Corp.  
 DURO-BRACE—Allis-Chalmers Manufacturing Co.  
 Duro Fittings Co., 2040 Santa Fe Ave., Los Angeles 21, Calif.  
 Duro Metal Products Co., Kildare & Schubert Sts., Chicago, Ill.  
 Duro-Test Corp., 2321 Hudson Blvd., North Bergen, N. J.  
 DUROBAR—Detjen Corp.  
 DUROBAR—Gardner Mfg. Co.  
 DUROCO—Scranton Battery Corp.  
 Durolet Mfg. Co.—see Red Seal Electric Co.  
 DUROLIER—Duro-Test Corp.  
 DUROID—Rogers Corp.  
 DUSTAY—Air-Maze Corp.  
 DUSTFOE—Mine Safety Appliances Co.  
 DUSTRONIC—Radex Corp.  
 DUSTUBE—American Wheelabrator & Equipment Corp.  
 DUTCH BOY—National Lead Company  
 DUTCH BRAND—Van Cleef Bros., Inc.  
 DUTI-RATED—Foots Bros. Gear & Machine Corp.  
 DUTRAX—Anaconda Wire & Cable Co.  
 DUXSEAL—Johns-Manville  
 DUZ-ALL—Siebier Mfg. Co.  
 DYNA-CRIMP—Aircraft Marine Products, Inc.  
 DYNA-FLASH—Milwaukee Electric Tool Corp.  
 DYNA-LINE—Brown-Brockmeyer Corp.  
 DYNAFAN—Mimar Products, Inc.  
 DYNALITE—Mitchell Manufacturing Co.  
 DYNAMASTER—Bristol Company  
 Dynamic Div., Eaton Mfg. Co., Kenosha, Wis.  
 DYNAMIC DUAL DRIVE—Peele Co.  
 DYNAPRENE—Blake Company, Whitney  
 DYNAPUMP—Fostoria Pressed Steel Corp.  
 DYNASEAL—Whitney Blake Co.  
 DYNASET—Telex, Inc.  
 DYNASPEDE—Dynamic Div., Eaton Mfg. Co.  
 DYNATACH—Electric Tachometer Corp.  
 DYNATRAN—Sola Electric Co.  
 DYNATROL—Sciaky Bros., Inc.  
 DYNETRIC—Gisholt Machine Co.  
 DYNETRIC—Westinghouse Electric Corp.  
 DYNO-MITE—Millers Falls Co.  
 DYNOGRAPH—Annis Company, R. B.

**E**

EBB—Elgo Shutter & Mfg. Co.  
 ECC—Electronic Control Corp.  
 ECCO—Marvin Mfg. Co.  
 E. C. & M.—Electric Controller & Mfg. Co.  
 ECO—Detex Watchclock Corp.  
 ECO—Economy Fuse & Manufacturing Co.  
 E.D.I.—Electronic Devices, Inc.  
 EE—Elliott Electric Products Co.  
 EF—Electric Furnace Co.  
 EL—Dayton Rubber Co.  
 E-LITE—Guth Company, Edwin F.  
 E.M.C.—Howard Industries, Inc.  
 EMD—Wing Mfg. Co., L. J.  
 EML—Howard Industries, Inc.  
 E-N—Electro-Nite Carbon Company  
 ETL—Electrical Testing Laboratories, Inc.  
 E-Z—Gaines-Collins Co., Quilada Tool Div.  
 E-Z—Henderson Electric Co.  
 E-Z—National Electric Products Corp.  
 E-Z—Penn-Union Electric Corp.  
 E-Z—Western Lithograph Co., Westline Products Div.  
 E Z I—H-H Fixture Co.  
 EZ-KUTR—Winpower Mfg. Co.  
 E-Z-RED—Wadsworth Electric Mfg. Co., Inc.  
 EZ-SERVICER—Wiley, Inc., R. & W.  
 E-Z STRIPPER—Ideal Industries, Inc.  
 EZ SWINGING—Acme Lite Products Co.  
 E-Z Way Tool Co., 128 W. Liberty St., Barrington, Ill.  
 EAGALINE—Eagle Electric Mfg. Co., Inc.  
 EAGALOK—Eagle Electric Mfg. Co., Inc.  
 EAGLE—Champion Cable Co.  
 EAGLE—Four Wheel Drive Auto Co.  
 Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, New York  
 Eagle Manufacturing Co., 3508 Avalon Blvd., Los Angeles 11, California  
 Eagle Plastics Co.—see Eagle Electric Mfg. Co., Inc.  
 EARL—Elgo Shutter & Mfg. Co.  
 Earl & Co., H. W., 2036 S.W. 57 Ave. (P. O. Box 135), Coral Gables, Fla.  
 Earle Gear & Machine Co., 4707 Stanton Ave., Philadelphia 44, Pennsylvania  
 Early Co., Edward E., 1129 Fifth St., N. W., Canton 3, Ohio  
 EASCO—Electric Arc Sales Co.  
 EASTMOUNT—Edwards Co., Inc.  
 EASTERN—Circle F Mfg. Co.  
 Eastern Chain Works, Inc., 309 E. 22 St., New York 6, N. Y.  
 Eastern Lighting Products Corp., 15 Somers St., Brooklyn 33, N. Y.  
 Eastern Metal of Elmira, Inc., 130 Harrison St., Elmira Heights, N. Y.  
 Eastern Specialty Co., 3617 N. 8th St., Phila. 40, Pa.  
 Eastern Tube & Tool Co., Inc.—see Etico Wire & Cable Corp.  
 EASTEX—Circle F Mfg. Co.

# COMPANY AND TRADE NAME DIRECTORY

EASY DRIVE—Thiel Tool & Engineering Co., Inc.  
 Easy-Eye Lighting, Inc.—see H&H Fixture Co.  
 EASY FLEX—Progressive Welder Sales Co.  
 EASY-ON—Thiel Tool & Engineering Co., Inc.  
 EASY-STRIP—Holub Industries, Inc.  
 EASY TACH—Quadrangle Mfg. Co.  
 Easy Washing Machine Corp., Solar, Spencer & Clinton  
 Sts., Syracuse 1, New York  
 Echo Mfg. Co., 265 N. Hamilton Rd., Columbus 13,  
 Ohio  
 Ebert Electronics Corp., 212-26 Jamaica Ave., Queens  
 Village 28, L. I., N. Y.  
 ECHO—Elgo Shutter & Mfg. Co.  
 ECLIPSE—Frick Co.  
 ECLIPSE—Montgomery Tool Co.  
 Eclipse Fuel Engineering Co., 1100 Buchanan, Rock-  
 ford, Ill.  
 Eco Clock Co.—see Detex Watchclock Corp.  
 ECOM—Economy Fuse & Manufacturing Co.  
 ECON-O-MATIC—American Pulley Co.  
 ECON O VAC—General Floorcraft, Inc.  
 ECONO-PAK—Lau Blower Co.  
 Economaster Sales, Inc., 120 Ninth Ave. N., Nashville,  
 Tenn.  
 ECONOMATIC—Electrigas Corp.  
 ECONOMATIC—National Pneumatic Co., Inc.  
 ECONOMIC—Erie City Iron Works  
 ECONOMY—Coates Electric Mfg. Co.  
 ECONOMY—Keston Electric Mfg. Co.  
 ECONOMY—Titchener & Co., E. H.  
 Economy Engineering Company, 4511 West Lake St.,  
 Chicago 24, Illinois  
 Economy Fuse & Manufacturing Co., 2717 North Green-  
 view Ave., Chicago 14, Illinois  
 ECONOMYSK—Gould-National Batteries, Inc.  
 ECONOSTAT—Barber-Colman Co.  
 EDCO—Eynon-Dakin Co.  
 Edco International Corp., 9993 Broad St., Detroit 4,  
 Mich.  
 EDDY-MAG—Electric Controller & Mfg. Co.  
 EDGE RAY—Curtis Lighting, Inc.  
 EDGEONM—Ward Leonard Electric Co.  
 Edison, Inc., Thomas A., Edison Storage Battery Div.,  
 West Orange, N. J.  
 Edison, Inc., Thomas A., Primary Battery Div., Belmont  
 Ave., Bloomfield, N. J.  
 Edison Electrical Co., 355 Weybosset St., Providence  
 3, R. I.  
 Edmor Lamp Co., 42 Lisenard St., New York 13,  
 N. Y.  
 EDUCATOR—Lighting Products, Inc.  
 Edwards Co., Inc., Pest Road, Norwalk, Conn.  
 Edwards of Canada, Ltd.—see Edwards Co., Inc.  
 EEPDO—Electro Engineering Products Co., Inc.  
 EESCO—Edison Electrical Co.  
 EFCOR—Electrical Fittings Corp.  
 EFCORLEY—Electrical Fittings Corp.  
 Efficiency Electric & Mfg. Co., Park Ave. Ext., Box 30,  
 East Palestine, Ohio  
 EFFICO—Hirschman-Pohle Co., Inc.  
 EICO—Electronic Instrument Co., Inc.  
 EIMAG—Eitel-McCullough, Inc.  
 Elenstat, David—see Metalelectrics, Inc.  
 Eisler Engineering Co., Inc., 750 S. 13 St., Newark 3,  
 N. J.  
 Eitel-McCullough, Inc., 798 San Mateo Ave., San  
 Bruno, California  
 Eitzen Co., Louis C., 17 West 60 St., N. Y. 23, N. Y.  
 El-Tronics, Inc., 437 N. Fifth St., Phila. 23, Pa.  
 EL TUBES—Electrons, Inc.  
 ELBENDERS—Henderson Electric Co.  
 ELCON—Elgo Shutter & Mfg. Co.  
 ELEC-TRIVET—Paragon Electric Co.  
 ElectroData Corp.—see Consolidated Engineering Corp.  
 ELECTRO-O-LINE—Minneapolis-Honeywell Regulator Co.  
 Electro Insulation Corp., 33-30 57th St., Woodside 77,  
 N. Y.  
 Electro Protection Co., Inc., 127 N. Lake Ave.,  
 Albany 6, N. Y.  
 ELECTRACOR—Special Products Co.  
 ELECTRANOT—Dominion Electric Corp.  
 Electrend Products Corp., St. Joseph 2, Michigan  
 ELECTRESTEEM—Electric Steam Radiator Corp.  
 ELECTRI-CENTER—Buildog Electric Products Co.  
 Electric-Cord Mfg. Co., Inc., 2554-2568 E. 18 St.,  
 Brooklyn 35, N. Y.  
 Electric Air Heater Co.—see Electromode Corp.  
 Electric Arc Inc., 152 Jelliff Ave., Newark 8, New  
 Jersey  
 Electric Arc Sales Co., 5270 Geddes Rd., Ann Arbor,  
 Mich.  
 Electric Auto-Lite Co., Champlain St., Toledo 1,  
 Ohio  
 Electric Blower Co., 352 Atlantic Ave., Boston 10,  
 Mass.  
 Electric Boat Co.—see Electro Dynamic Div., General  
 Dynamics Corp.  
 Electric Controller & Mfg. Co., 4493 Lee Rd., Cleve-  
 land 28, Ohio  
 Electric Cord Company, 195 William St., New York 38,  
 New York  
 Electric Deodorizer Corp.—see Edco International Corp.  
 ELECTRIC DOORMAN—Electric Power Door Co.  
 Electric Fish Screen Co., 1130 North Poinsettia Pl.,  
 Hollywood 46, California  
 ELECTRIC FLOWER—Aerolux Light Corp.  
 Electric Fly Screen Co., Inc.—see Electrocuting Fly  
 Screen Div., Detjen Corp.  
 Electric Furnace Co., West Wilson St., Salem, Ohio  
 Electric Heater Co., 45 Seymour St. (P. O. Box 188),  
 Stratford, Conn.  
 Electric Heating Products, Inc.—see Everwarm, Inc.  
 Electric Hotpack Co., Inc., Cottman Ave. at Melrose  
 St., Philadelphia 35, Pennsylvania  
 ELECTRIC JANITOR—Minneapolis-Honeywell Regulator  
 Co.  
 Electric Machinery Mfg. Co., 800 Central Ave., Minne-  
 apolis 13, Minnesota

Electric Machinery Mfg. Co., Mullenbach Div., 2300  
 E. 27 St., Los Angeles 58, Calif.  
 Electric Materials Co., North East, Pa.  
 Electric Motor Corp.—see Howard Industries Inc.  
 Electric Motors & Specialties, Inc., King & Hamsher  
 Sts., Garrett, Ind.  
 Electric Parts Corp., 2525 West Moffat St., Chicago  
 47, Illinois  
 Electric Power Door Co., 2127 E. Lake St., Minne-  
 apolis 7, Minn.  
 Electric Power Plants Corp., Buffalo St., Cadiz, Ohio  
 Electric Products Co., 1725 Clarkstone Rd., Cleveland  
 12, Ohio  
 Electric Railway Equipment Co.—see Elreco Corp.  
 Electric Regulator Corp., Norwalk, Conn.  
 Electric Service Engineering Co., 10 Third Ave., Joliet,  
 Illinois  
 Electric Service Manufacturing Company, 17th & Cam-  
 bridge Streets, Philadelphia 32, Pennsylvania  
 Electric Service Systems, Inc., 1330 Quincy St., N. E.,  
 Minneapolis 13, Minnesota  
 Electric Soldering Iron Co., Inc., West Elm St., Deep  
 River, Conn.  
 Electric Specialty Co., 211 South St., Stamford, Con-  
 necticut  
 Electric Steam Radiator Corp., 1 Electric Ave., Paris,  
 Ky.  
 Electric Storage Battery Co., Exide Industrial Div.,  
 42 S. 15 St., Phila. 2, Pa.  
 Electric Storage Battery Co., Jordan Electrical Mfg.  
 Co. Div., 222-228 N. 2nd St., Minneapolis 1, Minn.  
 Electric Storage Battery Co., Stokes Molded Products  
 Div., Taylor & Webster Sts., Trenton, N. J.  
 Electric Storage Battery Co., Willard Storage Battery  
 Co. Div., 246-286 E. 131 St., Cleveland 1, Ohio  
 Electric Switch Corp., 1340 Eleventh St., Columbus,  
 Ind.  
 Electric Tachometer Corp., 68th & Upland Sts., Phila.  
 42, Pa.  
 Electric Tube Products, 74-16 Grand Ave., Maspeth,  
 N. Y.  
 Electrical Distributors Co., Liberty Trust Bldg., Phila.  
 7, Pa.  
 Electrical Engineers Equipment Co., 25th Ave., Melrose  
 Park, Ill.  
 Electrical Fittings Corp., 37-50 57th St., Woodside 77,  
 N. Y.  
 Electrical Facilities, Inc., 4224 Holden St., Oakland  
 8, California  
 Electrical Mfg. Co., Box 217, Battle Creek, Mich.  
 Electrical Refractories Co., 1900 E. Clark St., East  
 Palestine, Ohio  
 Electrical Testing Laboratories, Inc., 2 East End Ave.,  
 New York 21, New York  
 Electrical Windings, Inc., 2015 N. Kolmar Ave., Chi-  
 cago 39, Ill.  
 ELECTRICTUBE—Mark & Co., Clayton  
 ELECTRIFUGAL—Allis-Chalmers Manufacturing Co.  
 Electrigas Corp., Newbridge & Windsor Rds., Bergen-  
 field, N. J.  
 ELTRIX—United States Rubber Co.  
 Electro-Air Cleaner Co., 1285 Reedsdale St., Pitts-  
 burgh 33, Pa.  
 Electro Compound Co., 4145 W. 150 St., P. O. Box  
 2772, Cleveland 11, Ohio  
 ELECTRO-COOLER—Allis-Chalmers Mfg. Co.  
 Electro Devices, Inc., 4025 Easton Ave., St. Louis 13,  
 Mo.  
 Electro Dynamic Div., General Dynamics Corp., 163  
 Ave. A, Bayonne, N. J.  
 Electro Engineering Products Co., Inc., 609 W. Lake  
 St., Chicago 6, Ill.  
 Electro Engineering Works, 6021 College Ave., Oakland  
 18, Calif.  
 ELECTRO FLOW—Super Flow Solder Co., Inc.  
 ELECTRO-GLOW—Industrial Devices, Inc.  
 Electro-Graphic Graver Co., Toledo Factors Bldg.,  
 Toledo 2, Ohio  
 ELECTRO-LARM—Electro Devices, Inc.  
 Electro Lift, Inc., 204 Sargeant Ave., Clifton, N. J.  
 Electro Mfg. Corp.—see Electro Silv-A-King Corp.  
 ELECTRO MAT—Interstate Rubber Products Corp.  
 ELECTRO-MATIC—Eastern Industries, Inc., Automatic  
 Signal Div.  
 Electro-Mechanical Devices Co.—see Nankervis Co.,  
 Geo. L.  
 Electro-Mechanical Instrument Co., 812 Chestnut St.,  
 Perkasie, Pennsylvania  
 Electro-Mechanical Specialties Co., 5695 Bellford Ave.,  
 Cleveland 27, Ohio  
 Electro-Mechano Co., 261 E. Erie St. EM, Milwaukee  
 2, Wis.  
 ELECTRO-MITE—Hays Mfg. Co.  
 Electro-Nite Carbon Co., 8061 Torresdale Ave., Phila.  
 36, Pa.  
 ELECTRO-PANE—Electro Devices, Inc.  
 Electro Rust-Proofing Corp., 30 Main St., Belleville,  
 N. J.  
 Electro-Seal Corp., 946 North Ave., Des Plaines, Ill.  
 Electro Silv-A-King Corp., 1535 S. Paulina St., Chi-  
 cago 8, Ill.  
 Electro-Snap Switch & Mfg. Co., 4218-30 W. Lake  
 St., Chicago 24, Ill.  
 Electro Switch Corp., 167 King Ave., Weymouth 88,  
 Massachusetts  
 Electro-Technical Products Div., Sun Chemical Corp.,  
 113 E. Centre St., Nutley 10, N. J.  
 Electro-Voice, Inc., 404 Carroll St., Buchanan, Mich.  
 ELECTROAIRE—Sanitron, Inc.  
 ELECTROCAM—Westinghouse Electric Corp.  
 Electrocuting Fly Screen Div., Detjen Corp., Skidmore  
 Rd., Freedom Plains, Pleasant Valley 1, N. Y.  
 ELECTROFLO—Hays Mfg. Co.  
 Electroflow, Inc.—see American Electronics, Inc.  
 ELECTROFLUID—Link-Belt Co.  
 ELECTROL—Murphy Elevator Co., Inc.  
 ELECTROLETS—Killark Electric Mfg. Co.  
 Electromaid Corp.—see Can Arm Corp.  
 ELECTROMATIC—National Time & Signal Corp.  
 ELECTROMATIC—Siebring Mfg. Co.

ELECTROMAZE—Air-Maze Corp.  
 Electromode Corp., 45 Crouch St., Rochester 3, New  
 York  
 Electron Corp., Sheet Metal Div., 675 Rio Grande  
 Ave., Littleton, Colo.  
 Electronic Control Corp., 1573 East Forest Ave.,  
 Detroit 7, Michigan  
 Electronic Controls, Inc.—see Dixie Controls Co.  
 Electronic Devices, Inc., 429 Twelfth St., Brooklyn 15,  
 N. Y.  
 Electronic Engineering Co. of Calif., Plug-In Div., 180  
 S. Alvarado St., Los Angeles 57, Calif.  
 Electronic Instrument Co., Inc., 84 Withers St., Brook-  
 lyn 11, N. Y.  
 Electronic Measurements Co., Inc., Lewis St. & Maple  
 Ave., Easton, N. J.  
 Electronic Transformer Co., 207 West 25th St., New  
 York 1, New York  
 ELECTRONIC SWITCH—Fisher Research Laboratory Inc.  
 Electronics Corp. of America, 77 Broadway, Cam-  
 bridge 42, Mass.  
 ELECTRONIK—Minneapolis-Honeywell Regulator Co.  
 Electrons, Inc., 127 Sunsex Ave., Newark 3, New  
 Jersey  
 ELECTROPULT—Westinghouse Electric Corp.  
 ELECTROSTRIP—Buildog Electric Products Co.  
 Electrovector Inc., 1660 E. New York Ave., Brooklyn  
 12, N. Y.  
 ELECTROX—Schauer Mfg. Corp.  
 ELECTRUMITE—Republic Steel Corp., Steel & Tubes  
 Div.  
 ELEMEX—Line Material Co.  
 ELEPHANT BRAND—Phosphor Bronze Corp.  
 ELEVEITE—Inclinator Co. of America  
 ELFXITE—National Specialties Co., Inc.  
 ELFCO—Everglow Lighting Fixture Co., Inc.  
 ELFURNO—Electric Furnace Co.  
 ELGIN—Elgo Shutter & Mfg. Co.  
 Elgin-Refined Div., Elgin Softener Corp., 134 N. Grove  
 Ave., Elgin, Ill.  
 Elgo Shutter & Mfg. Co., 2738 West Warren Ave.,  
 Detroit 8, Michigan  
 ELIED—Farrelloy Company  
 ELIPSO—Appleton Electric Co.  
 ELIPTICONE—Art Metal Co.  
 ELIPTISQUARE—Art Metal Co.  
 Elite Glass Co., 111 West 22 St., New York 11,  
 New York  
 Elite Import Co.—see Elite Glass Co., Inc.  
 ELJAY—Segil Co., L. J.  
 ELK—Elgo Shutter & Mfg. Co.  
 Elkar Products Co., 323-27 W. 16 St., N. Y. 11,  
 N. Y.  
 Elkington Manufacturing Co., 461 South Van Ness  
 Ave., San Francisco 3, California  
 Elianar Chemical Co., 2308 Oakton St., Evanston,  
 Illinois  
 Elliott Co., Jeannette, Pa.  
 Elliott Co., Crocker-Wheel Div., Ampere, N. J.  
 Elliott Electric Products Co., 1513 Olmstead Ave., New  
 York 62, N. Y.  
 Elliott Mfg. Co., 350 State St., Binghamton, N. Y.  
 ELLIPTI-FLOOD—Electro Silv-A-King Corp.  
 ELLIPTO-LITE—Benjamin Electric Mfg. Co.  
 ELM—Elgo Shutter & Mfg. Co.  
 ELPAR—Elwell-Parker Electric Co.  
 ELPECO—Roller-Smith Corp.  
 Elreco Corp., 2900 Cornany Ave., Cincinnati 25, Ohio  
 ELSCO—Waveland Electric Co.  
 Elwell-Parker Electric Co., 4319 St. Clair Ave., Cleve-  
 land 3, Ohio  
 Elwood Corp., 2180 Elmwood Ave., Buffalo 23, N. Y.  
 EMCO—Ender-Monarch Corp.  
 Emeloid Co., Inc., 1239 Central Ave., Hillside 5, N. J.  
 Emeralite Co., Inc., 40 Warren St., New York 7, New  
 York  
 EMERSON—Quiet-Heat Mfg. Corp.  
 Emerson Electric Manufacturing Co., 8100 Florissant  
 Ave., St. Louis 21, Missouri  
 EMFAC—Electro-Mechanical Instrument Co.  
 EMILY—Porcelain Products, Inc.  
 Emmett Machine & Mfg. Inc., 445 E. Turkeyfoot Lake  
 Rd., Akron 19, Ohio  
 EMPIRE—American Radiator & Standard Sanitary  
 Corp.  
 EMPIRE—Diamond Expansion Bolt Co., Inc.  
 EMPIRE—Mica Insulator Co.  
 Empire Corp., Suite 317, 611 N. Broadway, Milwaukee,  
 Wis.  
 Empire Ironer, Inc.—see Empire Products, Inc., Cam-  
 Lok Div.  
 Empire Milking Machine Co.—see Esco Cabinet Co.  
 Empire Products Inc., Cam-Lok Div., 9051 Blue Ash  
 Rd., Box 98, Cincinnati 36, Ohio  
 Empire Switchboard Co., Inc., 810 Fourth Ave., Brook-  
 lyn 32, New York  
 Empire Wire & Cable Co., Penn Yan, New York  
 Enmeled Metals Co.—see Pittsburgh Standard Conduit  
 Co.  
 ENAMELITE—Republic Steel Corp., Steel & Tubes Div.  
 ENAMELKOTE—Mark & Co., Clayton  
 Ender Mfg. Corp.—see Ender-Monarch Corp.  
 Ender-Monarch Corp., 50 Sylvester St., Westbury,  
 N. Y.  
 ENDO—Elgo Shutter & Mfg. Co.  
 ENDOVAL—Revere Electric Mfg. Co.  
 ENDULATOR—Rusgreen Mfg. Co.  
 ENDURITE—Crescent Insulated Wire & Cable Co.  
 ENDUPRENE—General Insulated Wire Works, Inc.  
 Energy Elevator Co., 214 New St., Philadelphia 6,  
 Pennsylvania  
 Engineering Products Corp.—see Powrex Switch Co.  
 Engelhard Inc., Charles, 850 Passaic Ave., East  
 Newark, N. J.  
 ENPO—Piqua Machine & Mfg. Co.  
 ENRUP—United States Rubber Co.  
 ENTERITE—General Cable Corp.  
 EONITE—United States Rubber Co.



Epco Electronics, Inc., 140 Liberty St., New York 6, New York  
 EQUALAD—Keystone Carbon Co.  
 Equi-Dyne, Inc., 5729 W. Ohio St., Chicago 44, Ill.  
 Equipment Engineering Co., 2853 Columbus Ave., Minneapolis, Minn.  
 Equipment & Service Co., 6815 Oriole Drive, Dallas 9, Texas  
 Equipito Div., Aurora Equipment Co., John & Prairie Sts., Aurora, Ill.  
 EQUISEAL—Allis-Chalmers Mfg. Co.  
 Eraser Co., Inc., Rush Wire Stripper Div., 1068 S. Clinton St., Syracuse 4, N. Y.  
 ERICKSON—Thomas & Betts Co.  
 Erickson Power Lift Trucks, Inc., St. Anthony Blvd. & University Ave. N. E., Minneapolis 18, Minn.  
 Erickson Special Equipment Mfg. Co.—see Erickson Power Lift Trucks, Inc.  
 Erico Products, Inc., 2070 East 61 Place, Cleveland 3, Ohio  
 Ericson Mfg. Co., 5209 Euclid Ave. (P. O. Box 1401), Cleveland 3, Ohio  
 Erie City Iron Works, Erie, Pa.  
 Erie Electric Co., Inc., 120 Church St., Buffalo 2, N. Y.  
 Erie Glass Mfg. Co., 564 Union Trust Bldg., Pittsburgh 19, Pa.  
 Erie Malleable Iron Co., Kandu Div.—see Kandu Corp.  
 Erie Resistor Corp., 644 West 12th St., Erie, Pennsylvania  
 Erie Tool Works, 12th & Liberty Sts., Erie, Pa.  
 Eriez Mfg. Co., 58 Magnet Drive, Erie, Pa.  
 ERWIN—Elgo Shutter & Mfg. Co.  
 ESCALATOR—Otis Elevator Co.  
 ESCO—Electric Specialty Co.  
 ESCO—Electric Switch Corp.  
 Esco Cabinet Co., East Biddle St., West Chester, Pa.  
 Esco Chain Works, Inc.—see Eastern Chain Works, Inc.  
 ESCORTS—Stevens Appliance Truck Co.  
 ESECO—Electric Service Engineering Co.  
 ESICO—Electric Soldering Iron Co., Inc.  
 ESSKIMO—Bersted Mfg. Co.  
 Ess Instrument Co., Div. of Ess Specialty Corp., 96 S. Washington Ave., Bergenfield, N. J.  
 Ess Specialty Corp.—see Ess Instrument Co.  
 ESSANAY—Pyrene Manufacturing Co.  
 ESSCO—Electric Service Manufacturing Company  
 Essex Wire Corp., 1601 Wall St., Fort Wayne 6, Indiana  
 Essex Wire Corp., Chicago Transformer Div.—see Chicago Standard Transformer Corp.  
 Essex Wire Corp., Parante Wire & Cable Div., 1601 Wall St., Fort Wayne 6, Indiana  
 Essex Wire Corp., R-B-M Div., 131 Godfrey St., Logansport, Ind.  
 Estellite Co., Inc., P. O. Box 230, Hoosick Falls, N. Y.  
 Esterline-Angus Co., Inc., P. O. Box 596, Indianapolis 6, Indiana  
 Estes & Sons, E. B., 100 Fifth Ave., New York 11, New York  
 ESTROLITE—Line Material Co.  
 Estv Mfg. Co., 1231 W. Monroe, Chicago 7, Ill.  
 ETON—Elgo Shutter & Mfg. Co.  
 Ettco Wire & Cable Corp., 75 Onderdonk Ave., Brooklyn 37, N. Y.  
 Euclid Electric & Mfg. Co., 50 Edwards St., Madison, Ohio  
 EUREKA—Morse Company, Frank W.  
 EVANOHM—Driver Co., Wilbur B.  
 Evans Sons, Inc., John, 500 N. 13 St., Phila. 23, Pa.  
 EVER-LOK—Russell & Stoll Company, Inc.  
 EVERDUP—American Brass Co.  
 EVEREADY—National Carbon Co.  
 Everett, Inc., E. A., Woodside, N. Y., 33-15 56th St., Woodside 77, N. Y.  
 Everglow Lighting Fixture Co., Inc., 433 Nepperhan Ave., Yonkers 3, N. Y.  
 EVERGREEN—Snyder & Son, Inc., M. L.  
 Everhot Manufacturing Co., 57 South 19th Ave., Maywood, Illinois  
 Everhot Products Co., 2009 W. Carroll Ave., Chicago 12, Ill.  
 EVERLASTING—Harper Co., H. M.  
 EVERLITE—Curtis Development & Mfg. Co.  
 EVERLOCK—Thomson-Bremer & Co.  
 EVERSPRAY—Everhot Products Co.  
 Everwarm Inc., 2717 1/2 N. Central Ave., North Knoxville, Tenn.  
 EXACTROL—Still-Man Company  
 EXAMOLITE—Macbeth Davlighting Corp.  
 EXBROOK—American Radiator & Standard Sanitary Corp.  
 Excel Electric Service Co., Inc., 2113 S. Western Ave., Chicago 8, Ill.  
 Excel Fuse Co., 117 W. Erie St., Pittsburgh 12, Pa.  
 EXCELLITE—Line Material Co.  
 Excellor Battery Co., Andrews Road, Columbus, Ga.  
 Excelsior Leather Washer Mfg. Co., Inc., 720-730 Chestnut St., Rockford, Illinois  
 EXECTROX—Schauer Manufacturing Corp.  
 Executione, Inc., 415 Lexington Ave., New York 17, New York  
 EXHAUST—Elgo Shutter & Mfg. Co.  
 Exhibit Supply Co.—see Electro-Snap Switch & Mfg. Co.  
 Exide Industrial Div., Electric Storage Battery Co., 42 S. 15 St., Phila. 2, Pa.  
 EXIDUST—Lamson Corp.  
 EXOLVE—Penetone Co.  
 EXPANDER—Arro Expansion Bolt Co.  
 EXPLOSIOMETER—Mine Safety Appliances Co.  
 EXPULSION PORT—Allis-Chalmers Mfg. Co.  
 EXTEND-O-STRIP—Good Mfg. Co., Inc.

## F

FA—Adam Electric Co., Frank  
 F.A.B. Mfg. Co., 1249 67th St., Oakland 8, Calif.\*

FHP—Dayton Rubber Co.  
 FR—Anaconda Wire & Cable Co.  
 F-3—Anaconda Wire & Cable Co.  
 F-7 THERMOPHORE—Battle Creek Equipment Co.  
 F & W—Flint & Walling Manufacturing Co., Inc.  
 FWD—Fluorescent Wiring Devices Inc.  
 FWD—Four Wheel Drive Auto Co.  
 FABCO—F. A. B. Manufacturing Co.  
 FACEWELD—Lincoln Electric Co.  
 Fairair Bearing Co., 37 Booth St., New Britain, Connecticut\*  
 Fairbanks, Morse & Co., 393 Lafayette St., New York 3, N. Y.  
 Fairbanks, Morse & Co., 600 South Michigan Ave., Chicago, Illinois  
 Fairchild Camera & Instrument Corp., Fairchild Industries Div., 110 Main St., Burlington, Vermont  
 Fairchild Engine & Airplane Corp., Speed Control Div., 90 Riberia St., St. Augustine, Fla.  
 Fairchild Industries—see Fairchild Camera & Instrument Corp.  
 FAIRFAX—Edwards Co., Inc.  
 FAIRLEADERS—Berry Co., William B.  
 FAIRWAY—Day-Brite Lighting Inc.  
 FAIRYLAND—Reinhardt-McArthur Co.  
 FALCON—Guth Co., Edwin F.  
 Falcon Equipment Co., 13th St., New Brighton, Pa.  
 Falk Corp., 3022 W. Canal St., Milwaukee 8, Wisconsin\*  
 Falstrom Co., 62 Falstrom Court, Passaic, N. J.  
 FAMOUS—Goshen Churn & Ladder, Inc.  
 FAN GLO—Markel Electric Products, Inc.  
 FAN GLO—LaSalle Products, Inc.  
 FARADAY—Sperti Faraday Inc.  
 FARADOID—Westinghouse Electric Corp.  
 FARBERWARE—Farber Inc., S. W.  
 FARCO—Farrelly Company  
 Fargo Mfg. Co., Inc., 845 Main St., Poughkeepsie, N. Y.\*  
 Faries Div., General Lamps Mfg. Corp., Elwood, Ind.  
 Faries Mfg. Co., 1060 E. Grand Ave., Decatur, Ill.\*  
 Faries Mfg. Corp.—see General Lamps Mfg. Corp.  
 FARM-A-LARM—Lord-Taber Co., Inc.  
 FARM-O-STAT—Minneapolis-Honeywell Regulator Co.  
 FARMBILT—Heatrice, Inc.  
 FARMOTOR—Westinghouse Electric Corp.  
 FARMSTARTER—Westinghouse Electric Corp.  
 Farrelly Company, 1245 North 26 St., Philadelphia 21, Pennsylvania  
 Faspray Corp., 116 Chestnut St., Red Bank, N. J.  
 Fast & Co., John E., 3183 North Pulaski Rd., Chicago 41, Illinois  
 FAST-ON—Denman Products Co.  
 FASTOME—Pyrene Manufacturing Co.  
 FASTHOLD—Mitchell-Rand Insulation Co.  
 FASTON—Aircraft-Marine Products, Inc.  
 FAST'S—Koppers Co., Inc.  
 FATHOMETER—Raytheon Mfg. Co., Equipment Marketing Div.  
 FAULTFINDER—Parr Electric Co.  
 FAXFILM—Brush Electronics Co.  
 FEATHER-TOUCH—Allis Chalmers Mfg. Co.  
 FEATHERITE—Century Lighting Co.  
 FEATHERTOUCH—Sherman & Reilly, Inc.  
 FEATHERTOUCH—Theiler Corp., H. J.  
 FEATHERWEIGHT—Goldak Co.  
 FEATHERWEIGHT—Wing Mfg. Co., L. J.  
 FEATHERWEIGHT CHAMP—Oster Mfg. Co.  
 FEDERAL—Dillin Corp., Frank W.  
 Federal Bearings Co., Inc., Poughkeepsie, N. Y.  
 Federal Electric Company, Inc.—see Federal Sign and Signal Corp.  
 Federal Electric Products Co.—see Federal Pacific Electric Corp.  
 Federal Enterprises, Inc.—see Federal Sign and Signal Corp.  
 Federal Lighting Div., Franklitt Co., 1425 Rockwell Ave., Cleveland 14, Ohio\*  
 Federal Machine and Welder Co., Clermont & Overland Ave., Warren, Ohio  
 Federal Pacific Electric Co., 50 Parish St., Newark 5, N. J.  
 Federal Screw Products Inc., 3917-25 N. Kedzie Ave., Chicago 18, Ill.  
 Federal Shock Mount Corp., 1079 Intervale Ave., New York, N. Y.  
 Federal Sign and Signal Corp., 8726 S. State St., Chicago 19, Ill.  
 Federal Telephone and Radio Co., Div. of International Telephone and Telegraph Corp., 100 Kingsland Rd., Clifton, N. J.  
 Federated Metals Div., American Smelting & Refining Co., 120 Broadway, New York 5, N. Y.  
 FEED-IN—Square D Co.  
 Feedrail Corp., 125 Barclay St., New York 7, N. Y.  
 FEL-PRO—Felt Products Mfg. Co.  
 Felco Products, Inc., 166 Express St., Dallas 2, Tex.  
 FELCOLD—Felt Products Mfg. Co.  
 Feld Corp., 1948-2002 Papin St., St. Louis 3, Mo.  
 Felt Products Mfg. Co., 1514 Carroll Ave., Chicago 7, Ill.  
 FEMCO—Fluorescent Equipment & Mfg. Co.  
 Fenton-Brewer, Inc., 225 Fifth Ave., New York 10, N. Y.  
 Fenwal Inc., Pleasant St., Ashland, Massachusetts\*  
 FERALOY—Crouse-Hinds Co.  
 FERHOPE—Magnetic Engineering & Mfg. Co.  
 Ferr Mfg. Co., Inc., 2125 S. Western Ave., Chicago 8, Ill.  
 FERRAMIC—General Ceramics & Steatite Corp.  
 Ferranti Electric, Inc., 30 Rockefeller Plaza, N. Y. 20, N. Y.  
 Ferrara, Inc., 8106 W. Nine Mile Rd., Oak Park 37, Mich.  
 FERRO—Linde Air Products Co.  
 Ferro Electric Products Inc., Kirkland, Ill.  
 Ferro Enamel Supply Co.—see Ferro Electric Products Inc.

FERRROWELD—Lincoln Electric Co.  
 Ferrubron Metal Paint Co., Subsidiary of Carbolineum Wood Preserving Co., 528 W. Highland Ave., Milwaukee 3, Wis.  
 FIBERDUCT—General Electric Co., Construction Materials Div.  
 Fibre Conduit Co.—see Orangeburg Mfg. Co., Inc.  
 FIBRON—Irrington Varnish & Insulator Co.  
 FIBRPLUG—Star Expansion Bolt Co.  
 Fidelity Chemical Products Corp., 470 Frelinghuysen Ave., Newark 5, N. J.  
 Fidelity Electric Co., 617 N. Prince St., Lancaster, Pa.  
 Fidelity Machine Company, Inc., 3908-18 Frankford Ave., Philadelphia 24, Pennsylvania  
 Fielden Instrument Corp.—see Fielden Instrument Div., Robertshaw-Fulton Controls Co.  
 Fielden Instrument Div., Robertshaw-Fulton Controls Co., 2920 N. Fourth St., Phila. 33, Pa.  
 FILMGRAPH—Miles Reproductor Co., Inc.  
 FILTER FAN—Marvin Mfg. Co.  
 FILTERETTE—Tobe Deutschmann Corp.  
 FILTERIZED—Tobe Deutschmann Corp.  
 FIRE-GUN—American-LaFrance-Foamite Corp.  
 FIREFLY—Northern Light Company  
 FIRESTONE—Beam Manufacturing Co.  
 Firetex System, Inc., 122 Naubac Ave. (P. O. Box 174), Glastonbury, Conn.  
 FIRETRON—Electronics Corp. of America  
 FIREWALL—Rockbestos Products Corp.  
 FIREYE—Combustion Control Corp.  
 FIREZONE—Rockbestos Products Corp.  
 FIRMA—Hirschman-Pohle Co., Inc.  
 Fisher and Porter Co., 335 Warmistern Rd., Hatboro, Pa.  
 FISHER—Lewthwaite Machine Co., Inc., T. H.  
 Fisher-Pierce Co., Inc., 170 Pearl St., South Braintree, Mass.  
 Fisher Research Laboratory Inc., Palo Alto, Calif.  
 Fiske Brothers Refining Co., Lubriplate Div., 129 Lockwood St., Newark 5, New Jersey  
 FIST-GRIP—Laughlin Co., Thomas  
 Fitter Co., Edwin H., Devereaux & Milnor Sts., Philadelphia 24, Pennsylvania  
 FITZ-BURNHAM—Fitz Water Wheel Co.  
 Fitz Water Wheel Co., Penn St. & Pennsylvania Railroad, Hanover, Pennsylvania  
 FIVE IN ONE—All-State Welding Alloys Co. Inc.  
 5-WAY—Superior Electric Co.  
 5000 LINE—Leviton Mfg. Co., Inc.  
 FLAME-OTROL—Barber-Colman Co.  
 FLAME-STOP—Phelps Dodge Copper Products Corp.  
 FLAMENOL—General Electric Co., Construction Materials Div.  
 FLAMINGO—Industrial Lamp Corp.  
 FLAROLITE—Portable Light Co., Inc.  
 FLASH—Phillips Manufacturing Co. Inc.  
 FLATLACK—Labelon Tape Co., Inc.  
 FLAVOR-SEAL—Fresh-and-Aire Div., Cory Corp.  
 FLAWLESS—National Copper & Smelting Co.  
 FLEET-LINE—Brown-Brockmeyer Co.  
 FLEETWAY—Connecticut Telephone & Electric Corp.  
 FLEETWELD—Lincoln Electric Co.  
 Fleron & Son, M. M., 113 N. Broad St., Trenton 8, N. J.  
 Fletcher Manufacturing Co., 302 East Second St., Dayton 2, Ohio  
 Fleur-O-Lier Mfrs., 2116 Keith Bldg., Cleveland 15, Ohio  
 FLEX-A-POWER—General Electric Co., Distribution Assemblies Dept.  
 FLEX ALL—Rome Cable Corp.  
 FLEX-ARM—Woodward Machine Co., Lighting Div.  
 FLEX-FIT—Charleston Rubber Co.  
 FLEX-LITES—Aero Motive Mfg. Co.  
 FLEX-LOC—Lloyd Products Co.  
 FLEX-LOY—Capewell Mfg. Co.  
 FLEX OAK—Chicago Belting Div., Chicago-Allis Mfg. Corp.  
 FLEX-RING—Smith & Serrell, Inc.  
 FLEX-SAF—Charleston Rubber Co.  
 FLEX-SOK—Stupakoff Ceramic & Mfg. Co.  
 FLEX-TUNG—Caewell Mfg. Co.  
 FLEXACON—Hatfield Wire and Cable Div., Continental Copper and Steel Industries, Inc.  
 FLEXALL—Rome Cable Corp.  
 FLEXARAY—Duro-Test Corp.  
 FLEXARC—Westinghouse Electric Corp.  
 FLEXARD—Spartan Saw Works, Inc.  
 FLEXARM—Art Specialty Co.  
 FLEXCOAT—Bisonite Co., Inc.  
 FLEXI-SWITCH—Nankervis Co., Geo. L.  
 FLEXIFONE—DuKane Corp.  
 FLEXILUGS—Frankel Connector Co.  
 FLEXITEST—Westinghouse Electric Corp.  
 FLEXLAB—Standard Electric Time Co.  
 FLEXLAY—National Electric Products Corp.  
 FLEXLINK—Dodge Mfg. Corp.  
 FLEXO—Art Specialty Co.  
 Flexo International Corp., 3255 W. Lake St., Chicago 24, Ill.  
 FLEXO-ACTION—Merkle-Korff Gear Co.  
 FLEXOLITER—Duro-Test Corp.  
 FLEXON—Flexonics Corp.  
 Flexonics Corp., 1430 S. Third Ave., Maywood, Ill.  
 FLEXPIN—Smith & Serrell, Inc.  
 FLEXSHIELD—American Electric Cable Co.  
 FLEXSTEEL—National Electric Products Corp.  
 FLEXTAN—Chicago Belting Div., Chicago-Allis Mfg. Corp.  
 FLEXTTEL—Utilities Service Co.  
 FLEXTUBE—National Electric Products Corp.  
 Flint & Walling Manufacturing Co., Inc., 95 Oak St., Kendahlville, Indiana  
 FLIP-ON—Reliable Electric Co.  
 FLIP SEAL—Rodale Mfg. Co., Inc.  
 FLIPON—Westinghouse Electric Corp.  
 FLO-LITE—Burton Mfg. Co.



# COMPANY AND TRADE NAME DIRECTORY

FLOATING AIR—Friedrich Refrigerators Inc.  
 FLOATROL—Automatic Control Co.  
 FLODRALIC—Rotary Lift Co.  
 Flood City Brass & Electric Co., Messenger & Elder  
 Sts., Johnstown, Pennsylvania  
 FLOOD MASTER—Smith-Victor Corp.  
 FLOOR-KING—American Floor Surfacing Machine Co.  
 FLOOR-VAC—Atlas Floor Surfacing Machinery Corp.  
 FLOORMASTER—Atlas Floor Surfacing Machinery Corp.  
 FLOORMASTER—Lewis-Shepard Products, Inc.  
 Florola Corp.—see Florola Products, Inc.  
 Florola Products, Inc., Tioga St. at Roosevelt Ave.,  
 York, Pennsylvania  
 FLOORMOBILE—Handling Devices Co., Inc.  
 FLORAFLOOD—Stieber Mfg. Co.  
 FLORALITE—Stieber Manufacturing Co.  
 FLORATOR—Fischer & Porter Co.  
 FLOSLIG—New Jersey Meter Co.  
 FLOTE—Gould—Kline Batteries, Inc.  
 FLOW-COLD—Acme Industries, Inc.  
 FLOW-MIZER—Acme Industries, Inc.  
 FLOW-TEMP—Acme Industries, Inc.  
 FLOW-THERM—Acme Industries, Inc.  
 FLOWER LIGHT—Aerolux Lights Corp.  
 Flower Mfg. Co., D. B., 1217 Spring Garden St.,  
 Phila. 23, Pa.  
 Flower Mfg. Co., Inc.—see Flower Mfg. Co., D. B.  
 FLUID-LITE—Stanley Electric Tools  
 FLUO LITER—Guth Co., Edwin F.  
 FLUOR DE LE—Segil Co., I. J.  
 FLUOR-O-CHEK—Ultra-Violet Products, Inc.  
 Fluores-O-Lite Co., Evans Terminal (North Broad St.),  
 Hillside 5, New Jersey  
 Fluorescent Co.—see Fluorescent Wiring Devices, Inc.  
 Fluorescent Equipment & Mfg. Co., 5105 Cowan Ave.,  
 Cleveland 27, Ohio  
 Fluorescent Fabricators—see H&H Fixture Co.  
 Fluorescent Wiring Devices Inc., 30 Tiffany Pl.,  
 Brooklyn 31, New York  
 Fluorocarbon Products Div., U. S. Gasket Co., 602 N.  
 10 St. (P. O. Box 93), Camden 1, N. J.  
 FLUOROFLEX—Resistoflex Corp.  
 FLUPRESCENT—House-O-Lite Corp.  
 FLUR-O-LAMP—Ladbury Co., Inc.  
 FLUR-O-LOCK—Ladbury Co., Inc.  
 FLUR-O-LUX—Fullerton Mfg. Corp.  
 FLURO-SPRAY—Duro-Test Corp.  
 FLUX F-3—Ellanar Chemical Co.  
 FLYBACKER—Radio City Products Co., Inc.  
 FOAMMASTER—Atlas Floor Surfacing Machinery Corp.  
 FOAMLINE—Plastoid Corp.  
 FOAMITE—American-LaFrance-Foamite Corp.  
 FOCALIPSE—Bersted Mfg. Co.  
 FOCALITE—Amplex Corp.  
 FOCALIZER—Penwood Numechron Co.  
 FOGEL-AIRE—Fogel Refrigerator Co.  
 FOGEL-FREEZE—Fogel Refrigerator Co.  
 Fogel Refrigerator Co., 5400 Eadom St., Philadelphia  
 37, Pennsylvania  
 FOLD-A-WAY—Patent Scaffolding Co., Inc.  
 Folsom Company, Inc., 3104 Oak Lane, Dallas 10,  
 Texas  
 FOOD CRAFTER—Westinghouse Electric Corp., Appli-  
 ances Div.  
 FOOT-EZE—Interstate Rubber Products Corp.  
 Foote Bros. Gear & Machine Corp., 4545 S. Western  
 Blvd., Chicago 9, Ill.  
 FOOTLIFT—Lewis-Shepard Products, Inc.  
 FOOTROL—General Control Co.  
 FORCE-FLD—Trane Company  
 Forstom Electric Co., 27 Park Place, New York 7,  
 New York  
 FOREMAN—Curtis Lighting, Inc.  
 FORLAMP—General Electric Co., Apparatus Sales Div.  
 FORMEX—General Electric Co., Construction Mate-  
 rials Div.  
 FORMEZE—General Cable Corp.  
 Formica Co., 4614 Spring Grove Ave., Cincinnati 32,  
 Ohio  
 FORMVAR—Anacoda Wire & Cable Co.  
 FORMVAR—Electric Auto-Lite Co., Wire and Cable  
 Div.  
 FORMVAR—General Cable Corp.  
 FORMVAR—Phelps Dodge Copper Products Corp.  
 Forsberg Manufacturing Co., 125 Seaview Ave., Bridge-  
 port 1, Connecticut  
 FORSTNER—Connecticut Valley Mfg. Co.  
 Fortson Co., 1400 Conit St., Houston 2, Tex.  
 Fort Worth Steel & Machinery Co., 2600 McCarl St.,  
 (P. O. Box 1038), Fort Worth 1, Tex.  
 FORTUNE—United States Rubber Co.  
 FORTY-SIXTY—Curtis Lighting, Inc.  
 FORWAY—U. S. Expansion Bolt Co.  
 Foster Transformer Co., 3620 Colerain Ave., Cincinnati  
 23, Ohio  
 POSTERITE—Westinghouse Electric Corp.  
 FOSTORIA—Bersted Mfg. Co.  
 Fostoria Pressed Steel Corp., N. Main St., Fostoria,  
 Ohio  
 FOTA-LITE—Corning Glass Works  
 FOTOELECTRIC—Worner Electronics Devices  
 FOUNDROMATIC—Allis-Chalmers Mfg. Co.  
 FOUR-STAR—Johns-Manville  
 Four Wheel Drive Auto Co., 105 E. 12th St., Clinton-  
 ville, Wis.  
 FOUR WINDS—Welch Co., W. W.  
 Fox Gun Co.—see Fox Products Co.  
 Fox Products Co., 4720 N. 18 St., Phila. 41, Pa.  
 FRAHM—Biddle Co., James G.  
 France Manufacturing Co., 10325 Berea Rd., Cleveland  
 2, Ohio  
 FRANCEFORMER—France Manufacturing Co.  
 FRANCKE—Smith & Serrell, Inc.  
 FRANCKE—Waldron Corp., John  
 Frankel Connector Co., 27 Vestry St., New York 13,  
 New York  
 Frankelite Co., Federal Lighting Div., 1425 Rockwell  
 Ave., Cleveland 14, Ohio

FRANKLIN—Bernard-Franklin Co., Inc.  
 FRANKLIN—Snyder & Sen, Inc., M. L.  
 Franklin Electric Co., Inc., 400 E. Spring St., Bluff-  
 ton, Ind.  
 FREE-VANE—Bristol Company  
 Freed, Inc., J. Melvin, Haring Switch Plate Co. Div.,  
 306 North Fifth St., Parkside, Pennsylvania  
 Freed Transformer Co., Inc., 1718 Weirfield St., Brook-  
 lyn 27, New York  
 Freeman & Co., Eugene John—see Multi-Matic Corp.  
 Freeway Washer & Stamping Co., P. O. Box 1756,  
 Cleveland, Ohio  
 FREEZ-RITE—Bailey & Perkins Co.  
 FREEZE PANTRY—Ryan Refrigeration Co.  
 FREEZ'R LOCKER—Gibson Refrigerator Co.  
 Frenchtown Porcelain Co., 9 Muirhead Ave., Trenton,  
 N. J.  
 FRESH-AIR MAKER—Market Electric Products, Inc.  
 FRESH-AIR MAKER—Schuster-Cummings Co.  
 Fresh'nd Aire Co.—see Fresh'nd Aire Div., Cory Corp.  
 Fresh'nd-Aire Div., Cory Corp., 221 N. LaSalle St.,  
 Chicago, Ill.  
 FRESNELITE—Century Lighting Inc.  
 Frick Co., Waynesboro, Pa.  
 Friedrich Refrigerators Inc., 1117 E. Commerce St.,  
 San Antonio 5, Tex.  
 Frigid, Inc., 128-168 32 St., Brooklyn 32, New York  
 Frigidaire Div., General Motors Corp., 300 Taylor St.,  
 Dayton 1, Ohio  
 FRIGIDIFLEX—Hatfield Wire and Cable Div., Continen-  
 tental Copper and Steel Industries, Inc.  
 FRIGISTAT—Minneapolis-Honeywell Regulator Co.  
 Frink Corp., 27-01 Bridge Plaza North, Long Island  
 City, New York  
 FRIG-LEG—Allis-Chalmers Mfg. Co.  
 FROST—Dejen Corp., Electrocuting Fly Screen Div.  
 FROST FREE—Westinghouse Elec. Corp., Appliance  
 Div.  
 FRYER-CHEF—Dominion Electric Corp.  
 FUL-GRIP—Maurey Mfg. Corp.  
 FUL-O-PEP—Standard Electric Co., Inc.  
 FULL-O-LITE—Fullerton Manufacturing Corp.  
 FULL-VISION—American Microphone Co.  
 Fullerton Mfg. Corp., Willard Rd., Norwalk, Conn.  
 Fullman Manufacturing Co., 1209-1215 Jefferson St.,  
 Latrobe, Pennsylvania  
 Fulton Manufacturing Corp., 206 Michigan St., Toledo  
 2, Ohio  
 Fulton Sylphon Div., Robertshaw-Fulton Controls Co.,  
 Box 400, Knoxville, Tenn.  
 FURNACESTAT—Minneapolis-Honeywell Regulator Co.  
 Furnas Electric Co., 1087 McKee St., Batavia, Ill.  
 FUSE-O-LINK—Clark Door Co., Inc.  
 FUSELITE—Alden Products Co.  
 FUSETEX—Eagle Electric Mfg. Co., Inc.  
 FUSETRON—Bussmann Manufacturing Co.  
 FUSETTE—Basic Products Corp.  
 FUSISTOR—S & C Electric Company  
 Fusite Corp., 6000 Fernview Ave., Cincinnati 13, Ohio  
 FUTURA—Metalcraft Products Co., Inc.  
 FUTURLITER—Guth Company, Edwin F.  
 FYBEROID—Wilmington Fibers Specialty Co.  
 FYBERGLASS—Rush Wire Stripper Div., Eraser Co. Inc.  
 FYR-CRY—Fyr-Fyter Company  
 Fyr-Fyter Company, 221 Crane St., Dayton 1, Ohio  
 FYRE-FREEZE—Kilde & Co., Inc., Walter  
 FYRINDEX—Scharff Inc., J. H.

## G

G-C—General Cement Manufacturing Co.  
 G-E—General Electric Co.  
 GES—Jefferson Engineering & Mfg. Co.  
 G-H—Girard-Hopkins  
 G-K—Graton & Knight Co.  
 G. L.—Liddeen, Inc., Gustave  
 G&M Lighting Co., 4432 Olive St., St. Louis 8, Mo.  
 GRC—Gries Reproducer Corp.  
 GS—General Scientific Equipment Co.  
 GSF—General Steel Fittings Co.  
 G-S-T—Guth Co., Edwin F.  
 G & W Electric Specialty Co., 7780 Dante Ave.,  
 Chicago 19, Illinois  
 Gaines-Collins Co., Delجاد Tool Div., 5474 Alhambra  
 Ave., Los Angeles 32, Calif.  
 GALV-KROM—Steel City Electric Co.  
 GALVAKOTE—Mark & Co., Clayton  
 GALVANOX—Subox, Inc.  
 Galvin Mfg. Corp.—see Motorola, Inc.  
 GALVITE—Republic Steel Corp., Steel & Tubes Div.  
 GAM (B. V.) CO.—General Armature & Mfg. Co.  
 GAMATEK—Consolidated Engineering Corp.  
 GAMCO—General Armature & Mfg. Co.  
 Gamewell Co., 1238 Chestnut St., Newton Upper Falls  
 64, Mass.  
 GAR-SEE-LITE—Garden City Plating & Mfg. Co.  
 Gar Wood Industries Inc., Wayne, Mich.  
 GARAGE-LITE—Woodward Machine Co., Lighting Div.  
 Garco Corp., 203 W. Thomas, Seattle 99, Wash.  
 GARC—Garden City Plating & Mfg. Co.  
 Garry Lighting—see Garden City Plating & Mfg. Co.  
 Garden City Fan Co., 332 S. Michigan Ave., Chicago 4,  
 Ill.  
 Garden City Plating & Mfg. Co., 1750 North Ashland  
 Ave., Chicago 22, Illinois  
 Gardner Electric Mfg. Co., 4227 Hollis St., Emeryville  
 8, Calif.  
 Gardner Mfg. Co., 260 E. Kansas St., Horicon, Wis.  
 Gardner Products Co., Div. of Detroit Industrial Pro-  
 ducts Co., 15244 Avey, Detroit 23, Mich.  
 GARDSMAN—Taco West Corp.  
 GARDSMAN—West Instrument Corp.  
 Garrett Mfg. Co., Inc., Route 202 & Jackson Ave.,  
 Pompton Plains, N. J.  
 Garvis Mfg. Co., 210 Court St., Des Moines 9, Iowa  
 Gary Screw and Bolt Div., Pittsburgh Screw & Bolt  
 Corp., P. O. Box 1708, Pittsburgh 30, Pa.  
 GASAPACK—A-P Controls Corp.

Gaston Power Tools Inc., 190 E. 158th St., Harvey,  
 Ill.  
 Gates & Co., Inc., George W. Hemstead Tpk.,  
 Lucille Ave., Franklin Square, Long Island, New  
 York  
 GAUGEWOOD—Fermica Co.  
 Gedney Electric Co., Americas Bldg., Radio City, N. Y.  
 20, N. Y.  
 GEHNRIK—Rockwell Company, W. S.  
 Geier, P. A.—see Royal Vacuum Cleaner Co.  
 Gelber Co., Samuel S., 162 North Clinton St., Chicago  
 6, Illinois  
 GEM—Elgo Shutter Mfg. Co.  
 GEM—Jay Broiler Co.  
 GEM—Jefferson Electric Co.  
 Gem Electric Mfg. Co., Inc., 237 37th St., Brooklyn,  
 N. Y.  
 Gemco Electric Co., 25685 W. 8 Mile Rd., Detroit 19,  
 Mich.  
 GEN-A-MATIC—Multi-Matic Corp.  
 GENCALLOY—General Cable Corp.  
 GENCASEAL—General Cable Corp.  
 GENCATEL—General Cable Corp.  
 GENCO—General Cabinet Corp.  
 GENCORONE—General Cable Corp.  
 GENERAL—Great Northern Mfg. Corp.  
 General Air Conditioning Corp., 4542 East Dunham  
 St., Los Angeles 23, California  
 General Armature & Mfg. Co., P. O. Box 370, Lock  
 Haven, Pa.  
 General Blower Co., 8610 Ferris Ave., Morton Grove,  
 Ill.  
 General Bronze Corp., Brach Mfg. Corp. Div., 200  
 Central Ave., Newark, N. J.  
 General Cabinet Corp., 1809 W. Thomas St., Chicago  
 22, Ill.  
 General Cable Corp., 420 Lexington Ave., N. Y. 17,  
 N. Y.  
 General Carbon Co., 320 N. Stenger St., Naperville,  
 Ill.  
 General Cement Manufacturing Co., 919 Taylor Ave.,  
 Rockford, Illinois  
 General Control Co., 1200 Soldiers Field Rd., Boston  
 34, Mass.  
 General Controls Co., 801 Allen Ave., Glendale, Calif.  
 General Dynamics Corp., Electro Dynamic Div., 163  
 Avenue A, Bayonne, N. J.  
 General Electric Co., Air Conditioning Div., 5 Lawrence  
 St., Bloomfield, New Jersey  
 General Electric Co., Apparatus Sales Div., 1 River  
 Road, Schenectady 5, New York  
 General Electric Co., Carboly Dept., 11177 East Eight  
 Mile Rd., Detroit 32, Michigan  
 General Electric Co., Chemical & Metallurgical Div.,  
 Coshocton, Ohio  
 General Electric Co., Chemical & Metallurgical Div.,  
 Waterford, N. Y.  
 General Electric Co., Chemical & Metallurgical Div.,  
 Pittsfield, Mass.  
 General Electric Co., Construction Materials Div., 1285  
 Boston Ave., Bridgeport 2, Connecticut  
 General Electric Co., Distribution Assemblies Dept., 41  
 Woodford Ave., Plainville, Conn.  
 General Electric Co., Electronics Div., Electronics  
 Park, Syracuse, N. Y.  
 General Electric Co., Hotpoint Co. Div., 5600 W.  
 Taylor St., Chicago 44, Ill.  
 General Electric Co., Lamp Division, Neia Park, East  
 Cleveland 12, Ohio  
 General Electric Co., Locke Department, P. O. Box  
 57, Baltimore 3, Maryland  
 General Electric Co., Major Appliance Div., Appliance  
 Park, Louisville, Ky.  
 General Electric Co., Small Appliance Div., 1285 Bos-  
 ton Ave., Bridgeport 2, Conn.  
 General Electric Co., Telechron Dept., Hemer Ave.,  
 Ashland, Mass.  
 General Electric Co., Trumbull Components Dept., 41  
 Woodford Ave., Plainville, Conn.  
 General Electric Co., Tube Dept., 1 River Rd., Sche-  
 nectady 5, N. Y.  
 General Electric Co., Wiring Device Dept., 95 Hath-  
 away St., Providence 7, Rhode Island  
 General Electric Co., X-Ray Department, 4855 Electric  
 Avenue, Milwaukee 1, Wisconsin  
 General Electric X-Ray Corp.—see General Electric Co.,  
 X-Ray Dept.  
 General Electronic Distributing Co., 98 Park Pl.,  
 New York 7, N. Y.  
 General Electronics Div.—see Arcturus Electronics Inc.  
 General Etching & Manufacturing Co., 3070-3082  
 West Grand Ave., Chicago 22, Illinois  
 General Floorcraft, Inc., 421 Hudson St., N. Y. 14,  
 N. Y.  
 General Hardware Mfg. Co. Inc., 80 White St., New  
 York 13, New York  
 General Insulated Wire Works, Inc., 69 Gordon Ave.,  
 Providence 5, R. I.  
 General Lamps Mfg. Corp., Elwood, Ind.  
 General Lighting Co., 248 McKibbin St., Brooklyn 6,  
 N. Y.  
 General Luminescent Corp.—see Pollak Luminescent  
 Corp.  
 General Machine & Welding Works, Inc., P. O. Box  
 958, Pomona, Calif.  
 General Magnetic Corp., 10001 Erwin Ave., Detroit 34,  
 Mich.  
 General Motors Corp., Delco Products Div., 330 East  
 First St., Dayton 1, Ohio  
 General Motors Corp., Frigidaire Division, 300 Taylor  
 St., Dayton 1, Ohio  
 General Motors Corp., Hyatt Bearings Div., Harrison,  
 New Jersey  
 General Motors Corp., Packard Electric Div., Warren,  
 Ohio  
 General Nuclear Corp., 550 Fifth Ave., New York  
 27, N. Y.  
 General Paper Tube Co., 2822 N. Jasper St., Phila.  
 34, Pa.

General Products Corp., 107 Salem St., Union Springs, N. Y.  
 General Radio Company, 275 Massachusetts Ave., Cambridge 39, Massachusetts.  
 General Riveters Inc., Electro-Mechanical Div., 785 Hertel Ave., Buffalo 7, N. Y.  
 General Scientific Equipment Co., 27th & Huntingdon Sts., Phila. 32, Pa.  
 General Steel Fittings Co., 1321 21 St., Racine, Wis.  
 General Switch Corp., 45 Roebing St., Brooklyn 11, New York  
 General Time Corp., Westcoast Div., LaSalle, Illinois  
 GENERALITER—Duro-Tect Corp.  
 GENESCOPE—Simpson Electric Co.  
 Genesee Laboratory, Inc., 16 Garden St., Auburn, N. Y.  
 Geophysical Instrument Co.—see Georator Corp.  
 GEOPRENE—General Electric Co., Construction Materials Div.  
 Georator Corp., Box 463, Manassas, Virginia  
 GEOTROL—General Electric Co., Construction Materials Div.  
 Gerbing Mfg. Corp., 11800 Milwaukee Ave., Northbrook, Ill.  
 Geringer & Sons Mfg. Corp., Peekskill, N. Y.  
 Getman Bros., U. S. Highway 31, North of Phoenix, South Haven, Mich.  
 Gets-A-Like Co., 3965 N. Milwaukee Ave., Chicago 41, Ill.  
 GIANT—Burgess Battery Company  
 GIBRALTAR—Johnson Belting Co. Inc.  
 GIBSIDLO—Gibson Electric Company  
 Gibson Electric Co., 8337 Frankstown Ave., Pittsburgh 21, Pa.  
 Gibson Manufacturing Co., 1919 Piedmont Circle, N. E., Atlanta, Georgia  
 Gibson Refrigerator Co., 515 West Williams St., Greenville, Michigan  
 GIBSUNAIRE—Gibson Refrigerator Co.  
 GILCO—United States Rubber Co.  
 Gill Glass and Fixture Co., Amber & Tioga Sts., Phila. 34, Pa.  
 GILLCO—Gill Glass and Fixture Co.  
 Gillespie Co., Robert, Pine Street, Ware, Mass.  
 GILMER—United States Rubber Co.  
 Gilmer Co., L. H.—see New York Belting & Packing Co.  
 GILT EDGE—Rhoads & Sons, J. E.  
 GIMBAL RINGS—Alexander-Tapp Industries, Inc.  
 GIMBALITES—Alexander-Tapp Industries, Inc.  
 GIRARD—Snyder & Son, Inc., M. L.  
 Gisholt Machine Co., 1245 E. Washington Ave., Madison 10, Wis.  
 Given Mfg. Co., 3301 Fruitland, Los Angeles 58, California  
 Glade Mfg. Co., 1632 W. 75 Pl., Chicago 20, Ill.  
 GLADIRON—Thor Corp.  
 GLADSTONE—Snyder & Son, Inc., M. L.  
 GLAS-BES—Sun Chemical Corp., Electro-Technical Products Div.  
 GLASCO—Glascock Brothers Mfg. Co.  
 Glascock Brothers Mfg. Co., 1500 West Fifth St., Muncie, Indiana  
 GLASDRILL—Star Expansion Bolt Co.  
 Glasolier Company, 307-309 Sixth St., Braddock, Pennsylvania  
 Glass Fibers Inc., 1810 Madison Ave., Toledo 2, Ohio  
 Glass Gorham Co., Cooler-Aire Div., 4845 N. Elston Ave., Chicago 30, Ill.  
 GLASSEAL—Pyramid Electric Co.  
 GLASSEAT—Continental Radiant Glass Heating Corp.  
 GLASSRAY—Crystalheat Co.  
 GLASSURFACED—Kirlin Company  
 Glastic Corp., 1823 E. 40 St., Cleveland 3, Ohio  
 Glatthar Lighting Co., 949 East 72 St., Cleveland 3, Ohio  
 GLAZON—Triangle Conduit & Cable Co., Inc.  
 Gleason & Co., Inc., J. L.—see Gleason Reel Corp.  
 Gleason-Avery, Inc., 45 Aurelius Ave., Auburn, N. Y.  
 Gleason Reel Corp., Subsidiary of Maysteel Products, Inc., 740 N. Plankinton Ave., Milwaukee 3, Wis.  
 Gleason Sales Co. Inc., 35-37 S. Desplaines St., Chicago 6, Ill.  
 GLENDALE—King Refrigerator Corp.  
 Glenn Co., 3134 E. 10 St., Oakland, Calif.  
 Glenn Equipment Co.—see Glenn Co.  
 Glenn-Roberts Co.—see Glenn Co.  
 GLIDE-O-MATIC—Century Product Works Inc.  
 GLIDE-O-MIR—General Cabinet Corp.  
 GLITEX—Genesee Laboratory, Inc.  
 GLO-POINT—Vernaline Products Co.  
 GLO-RAY—Curtis Lighting, Inc.  
 GLO-RING—Lennox Furnace Co.  
 GLO-RITE—Phillips Co., Oscar  
 Global Div., Carborundum Co., Niagara Falls, N. Y.  
 Globe Fittings Corp., 311 Washington St., Orange, N. J.  
 Globe Industries, Inc., 1784 Stanley Ave., Dayton 4, Ohio  
 Globe Laboratories, P. O. Box 853, Sherman Oaks, Calif.  
 Globe Lighting Products, Inc., 1710 Flushing Ave., Brooklyn 37, N. Y.  
 Globe Machine & Stamping Co.—see Globe Stamping Div., Hupp Corp.  
 Globe Stamping Div., Hupp Corp., 1250 W. 76 St., Cleveland 2, Ohio  
 Globe-Union Inc., Centralab Div., 900 E. Keefe Ave., Milwaukee 1, Wis.  
 GLOLITE—Penwood Numechron Co.  
 GLOMASTER—Pryne & Company, Inc.  
 GLOW-LITE—Spencer Industries  
 GLOWLITE—Lintern Corp.  
 GLYPITAL—General Electric Co., Chemical & Metallurgical Div.  
 Godfrey Manufacturing Co., 2642 South Michigan Ave., Chicago 16, Illinois  
 Goetz Manufacturing Co., J. F., 162 South St., Hartford, Wisconsin

GOETTER—Revolator Co.  
 GOLD—Gold Car Heating & Lighting Co.  
 GOLD BAND—Maxon Premix Burner Co.  
 Gold Car Heating & Lighting Co., 33 35th St., Brooklyn 32, New York  
 GOLD MEDAL—Patent Scaffolding Co., Inc.  
 GOLD SEAL—Jenkins Brothers, Rubber Div.  
 Goldak Company, 1544 E. West Glenoaks Blvd., Glendale 1, California  
 Goldberg & O'Brien Electric Co., Ther Electric & Machine Works Div., 17 S. Jefferson St., Chicago 6, Ill.  
 GOLDEN SUNBURST—Globe Lighting Products, Inc.  
 GOLLIATH—Fogel Refrigerator Co.  
 Good-Air Electric Mfg. Co., 112 W. First St., Ogallala, Neb.  
 Good Manufacturing Co., Inc., 618 West Elm St., Chicago 10, Illinois  
 Goodrich Co., B. F., Industrial Products Div., 500 S. Main St., Akron, Ohio  
 Goodrich Electric Co.—see Appleton Electric Co.  
 Goodyear Industrial Products Co., Inc., 18 Murray St., N. Y., N. Y.  
 Goshen Churn & Ladder, Inc., Goshen, Ind.  
 Goslin Electric & Mfg. Co., 2921 W. Olive St., Burbank, Calif.  
 Gould-National Batteries, Inc., 467 Calhoun St., Trenton, New Jersey  
 Goulds Pumps, Inc., 200 Fall St., Seneca Falls, New York  
 GRA-LAB—Dimco-Gray Co.  
 GRAD-U-FLOW—Minneapolis-Honeywell Regulator Co.  
 GRAD-U-MOTOR—Minneapolis-Honeywell Regulator Co.  
 GRAD-U-RELAY—Minneapolis-Honeywell Regulator Co.  
 GRAD-U-STAT—Minneapolis-Honeywell Regulator Co.  
 GRAD-U-SWITCH—Minneapolis-Honeywell Regulator Co.  
 GRAD-U-THERM—Minneapolis-Honeywell Regulator Co.  
 GRADUTROL—Minneapolis-Honeywell Regulator Co.  
 Graham Co., Inc., Phillip E., 2606 W. Michigan St., Indianapolis 22, Ind.  
 Graham Mfg. Corp., 1541 E. 8 Mile Rd., Ferndale, Mich.  
 Graham Transmissions, Inc., Menomonee Falls, Wisconsin  
 GRAKO—Graton & Knight Co.  
 GRAMIX—United States Graphite Co.  
 GRANGER—Boston Woven Hose & Rubber Co.  
 Grant Gear Works, Inc., 154 West Second St., South Boston 27, Massachusetts  
 GRAPHALLOY—Graphite Metallizing Corp.  
 GRAPHITAR—United States Graphite Co.  
 Graphite Metallizing Corp., 1052 Nepperhan Ave., Yonkers, N. Y.  
 GRASSHEAR—Stanley Electric Tools  
 GRATELITE—Guth Company, Edwin F.  
 Graton & Knight Co., 356 Franklin St., Worcester 4, Massachusetts  
 Gray & Dudley Company, 2300 Clifton Rd., Nashville 3, Tennessee  
 Gray Instrument Company, 64 West Johnson St., Philadelphia 44, Pennsylvania  
 Gray Laboratory & Mfg. Co.—see Dimco-Gray Co.  
 Gray Wire Specialty Co., 1761 East 39th St., Cleveland 14, Ohio  
 Graybar Electric Co., Inc., 420 Lexington Ave., New York 17, New York  
 GREAS-NO—Great Northern Manufacturing Corp.  
 GREASTOP—Air-Maze Corp.  
 Great Lakes Carbon Corp., 18 E. 48 St., New York, N. Y.  
 Great Northern Mfg. Corp., 1056 N. Wood St., Chicago 12, Ill.  
 GREAT SEAL—New York Belting & Packing Co.  
 Great Western Fuse Div., Titeflex, Inc., 500 Frelinghuysen Ave., Newark 5, N. J.  
 Green, Inc., R. H., 1201-24th St., Oakland 7, California  
 Green Ball Bearing Co., 9518 Cassius Ave., Cleveland 5, Ohio  
 GREEN GUARD—Security Mfg. & Contracting Co.  
 GREENFLIT—Equipment & Service Co.  
 Greenlee Tool Co., Div. of Greenlee Bros. & Co., 2136 Twelfth St., Rockford, Ill.  
 Greomar Mfg. Co., Inc., Wright St., Lynn, Mass.  
 GRENADE—Wakefield Co., F. W.  
 GREY PERFECT—United States Rubber Co.  
 GRID—Murray Mfg. Co., D. J.  
 GRID-A-BOUT—Dominion Electric Corp.  
 GRID-LITE—Benjamin Electric Mfg. Co.  
 GRID-O-MATIC—Dominion Electric Corp.  
 Gries Reproductor Corp., 123 Beechwood St., New Rochelle, N. Y.  
 Grive-Hendry Co., Inc., 1401-17 W. Carroll Ave., Chicago 7, Ill.  
 GRILL-N-WAFFLER—Westinghouse Electric Corp., Appliance Div.  
 Grinnell Company, Inc., 260 West Exchange St., Providence 1, Rhode Island  
 Grinnell-Saunders—see Grinnell Company, Inc.  
 GRIP-FLEX—Copperwell Steel Co.  
 GRIP-FLEX—Shipper Mfg. Co.  
 GRIP-KLIPS—Specialties, Inc.  
 GRIP-O-MATIC—Owatonna Tool Co.  
 GRIP-SPINTITE—Stevens Walden, Inc.  
 Grip-Tite Mfg. Co., 115 W. Jefferson St., Winterset, Iowa  
 GRIPBELT—Browning Mfg. Co.  
 GRIPOTAN—Rhoads & Sons, J. E.  
 GRIPSO—Bassford Co., H. R.  
 GRIPZEN—Star Expansion Bolt Co.  
 GRIZZLY—Pucel Enterprises, Inc.  
 GRIZZLY—United States Rubber Co.  
 Gross Chandelier Co., 2036 Delmar Blvd., St. Louis 3, Mo.  
 GROUND-OMER—Slicht Co., Inc., Herman H.  
 GROUNDULET—Crouse-Hinds Co.  
 Gruber Bros., Inc.—see Gruber Lighting  
 Gruber Lighting, 125 S. First St., Brooklyn 11, N. Y.

GRYPHON—Brook Motor Corp.  
 GUARANTEE—Partrick & Wilkins Co.  
 Guaranteed Products, Inc.—see Shox-Stok, Inc.  
 GUARDENE—Pyrene Manufacturing Co.  
 GUARDIAN—General Cable Corp.  
 Guardian Electric Mfg. Co., 1621 W. Walnut St., Chicago 12, Ill.  
 GUARDSMAN—Detex Watchlock Corp.  
 Guibert Steel Co., 4001 Windgap Ave., Pittsburgh 4, Pa.  
 Guider, Roll and Service Co., P. O. Box 3747, Daytona Beach, Fla.  
 GUIDEROL—McGill Manufacturing Co., Inc.  
 GUILD—Porter-Cable Machine Co.  
 GUILLOTINE—Manco Mfg. Co.  
 Gulf Refining Co., Gulf Oil Corp., 1822 Gulf Bldg., Pittsburgh 30, Pa.  
 GULF STREAM—Signal Electric Mfg. Co.  
 GULFCREST—Gulf Refining Co., Gulf Oil Corp.  
 Gulfport Cressing Co., P. O. Box 995, Gulfport, Miss.  
 GURNEY—Marlin-Rockwell Corp.  
 GUSCO—Gustavson, Inc.  
 Gustavson, Inc., 8600 Chestnut St., Kansas City 30, Missouri  
 Guth Company, Edwin F., 2615 Washington Blvd., St. Louis 3, Missouri  
 GUTHLITE—Guth Company, Edwin F.  
 GUY-GIP—Preformed Line Products Co.  
 Guyan Machinery Co., Inc., Box 150, Logan, W. Va.  
 William Co., 360 Furman St., Brooklyn 1, New York  
 GYRA-FLO—Chicago Blower Corp.  
 GYRALITE—Pyle-Intell Corp.  
 GYRO-LITE—Swivelier Co., Inc.  
 GYROL—American Blower Corp.

## H

H-B Instrument Co., American & Bristol Sts., Philadelphia 40, Pa.  
 H & H—Arrow-Hart & Hegeman Electric Co.  
 H&H Fixture Co., 1313 Walton Ave., St. Louis 13, Mo.  
 HI—Holub Industries, Inc.  
 H-P—Hatheway & Patterson Co., Inc.  
 HV-1—T-E Circuit Breaker Co.  
 Hartz-Mason, Inc., 270 Pleasant St., Watertown 72, Mass.  
 HABIRDUCT—Phelps Dodge Copper Products Corp.  
 HABIRITE—Phelps Dodge Copper Products Corp.  
 HABIRENE—Phelps Dodge Copper Products Corp.  
 HABIRLOY—Phelps Dodge Copper Products Corp.  
 HABIRPRENE—Phelps Dodge Copper Products Corp.  
 HABIRSHAW—Phelps Dodge Copper Products Corp.  
 HAC-SAW—Dreier Brothers, Inc.  
 Hadco Aluminum Products Co., 501 Pressley St., Pittsburgh 12, Pa.  
 Haertel Co., Walter, 2840 4th Ave. So., Minneapolis, Minn.  
 Haft & Sons, Inc., 950 Kent Ave., Brooklyn 5, New York  
 HAFTSON—Haft & Sons, Inc.  
 Hagan Co., George J., 2400 East Carson St., Pittsburgh 3, Pennsylvania  
 HAIROUND—Graton & Knight Co.  
 HAIRPINLINE—Illuminating Engineering Co.  
 Halcotte Company, Inc., 68 34th St., Brooklyn 32, New York  
 Haled Electronics Co., 57 William St., N. Y. 5, N. Y.  
 Hales Electric Co., Orange, Mass.  
 Hales & Co., Inc., R. G., 767 Spitzer Bldg., Toledo 4, Ohio  
 HALF-MILE-RAY—Portable Light Co., Inc.  
 HALIDE—Turner Brass Works  
 Hallett Manufacturing Co., 1601 West Florence Ave., Inglewood, California  
 Hamilton Beach Co., Div. of Scovill Mfg. Co., Racine, Wis.  
 Hamilton Caster & Mfg. Co., 1519 Dixie Highway, Hamilton, Ohio  
 Hamilton Fan & Blower Co., 2266 Bogen St., Cincinnati 14, Ohio  
 Hamilton Manufacturing Co., Two Rivers, Wisconsin  
 Hammarlund Mfg. Co., Inc., 460 West 34th St., New York 1, New York  
 HAMMER BLOW—Montgomery Too' Co.  
 HAMMERKORE—Tilden Tool Mfg. Co.  
 HAMMETTER—Simpson Electric Co.  
 HAMFLUTE—Star Expansion Bolt Co.  
 HAMRTWIST—Star Expansion Bolt Co.  
 Han-Kor, Inc., 9520 Richmond Ave., Cleveland 5, Ohio  
 Hancock Inspirator Co.—see Manning, Maxwell & Moore, Inc.  
 HAND-I-HACK—Lipe-Rollway Corp.  
 HAND-VAC—Hamilton Beach Co.  
 HANDEE—Chicago Wheel & Mfg. Co.  
 HANDI CONNECTORS—General Electric Co., Trumbull Components Dept.  
 HANDI-GLOW—Industrial Devices, Inc.  
 HANDI-HEAT—Leckie Electric Utensil Co., Inc.  
 HANDI-LITE—Kees Mfg. Co., F. D.  
 HANDI-LUG—General Electric Co., Trumbull Components Dept.  
 HANDICAP—Kortick Mfg. Co.  
 Handicraft Div., Burgess Battery Co.—see Burgess Vibrocrafts  
 HANDIE-MICRO-TALKIE—Motorola Communications & Electronics, Inc.  
 HANDIE-TALKIE—Motorola Communications & Electronics, Inc.  
 HANDIFAN—McLarty Systems  
 HANDIGRIP—Plummer Spray Equipment Co.  
 HANDIPOINT—Kortick Mfg. Co.  
 HANDITOO—Cincinnati Tool Co.  
 Handian, Inc., First, Poplar & Plum Sts., St. Louis 2 Mo.  
 Handian-Buck Co.—see Handian, Inc.

Handling Devices Co., Inc., 43-45 Pearl St., Brookline 46, Mass.  
 HANDY-Holsclaw Bros., Inc.  
 HANDY ANDY-Western Wire Products Co.  
 HANDY-BENDY-Tal Bender, Inc.  
 HANDY-CRAFT-Westinghouse Electric Corp.  
 HANDY EXPAND-Knuth Engineering Co.  
 HANDY HANNAH-Standard Products Corp.  
 HANDY HOISTER-Lewis-Shepard Products, Inc.  
 HANDY TUBE EXPAND-Knuth Engineering Co.  
 HANGOLITE-Line Material Co.  
 HANOVER-Fitz Wheel Co.  
 Hanovia Chemical & Manufacturing Co., 100 Chestnut St., Newark, New Jersey  
 Hansen Mfg. Co., Inc., RR 1, Princeton, Ind.  
 Hanson Co., C. H., 303 W. Erie St., Chicago 10, Ill.  
 HAP-E-LITE-Alco Mfg. Co.  
 HAPCO-Hubbard & Co.  
 HARBOT-Unimatic Corp.  
 HARCRAFT-Harvey Aluminum  
 HARD-TUNG-Capewell Mfg. Co.  
 Hardman Co., Inc., H. V., 571 Cortlandt St., Belleville 9, N. J.  
 Hardy Tools—see Interstate Drop Forge Co., Special Products Div.  
 HARGRAVE-Cincinnati Tool Co.  
 Haring Switch Plate Co., Div. of J. Melvin Freed, Inc., 306 N. Fifth St., Perkasie, Pa.  
 HARMIC-Wall Manufacturing Co., P.  
 HARMONY-Mayland's Son, R. H.  
 Harold Electric Co., 210 East Alder St., Walla Walla, Washington  
 Harper Co., H. M., 8200 Lehigh Ave., Morton Grove, Illinois  
 Harper Electric Furnace Corp., 39 River St., Buffalo 2, New York  
 Hart & Hegeman—see Arrow-Hart & Hegeman Electric Co.  
 HART-LOCK—Arrow-Hart & Hegeman Electric Co.  
 Hart Manufacturing Co., 110 Bartholomew Ave., Hartford, Connecticut  
 HARTER—Multi Electric Mfg., Inc.  
 Hartford Blower Co.—see Sterling Blower Co.  
 Hartman Electrical Mfg. Co., 175 N. Diamond St., Mansfield, Ohio  
 Hartzell Propeller Fan Co., Div. of Castle Hills Corp., S. Engle Ave., Piqua, Ohio  
 HARTZITE-Hartzell Propeller Fan Co.  
 HARVEL—Irrington Varnish & Insulator Co.  
 Harvey Aluminum, 19200 S. Western Ave., Torrance, Calif.  
 Harvey Machine Co., Inc.—see Harvey Aluminum  
 HASCO—National Band & Tag Co.  
 Hasco Electric Corp., 11 Cray Ave., Mount Vernon, N. Y.  
 HATEMP—Hatfield Wire and Cable Div., Continental Copper and Steel Industries, Inc.  
 HATEX—Continental Copper & Steel Indus., Inc., Hatfield Wire & Cable Div.  
 Hatfield Rubber Works—see Hatfield Wire and Cable Div., Continental Copper and Steel Industries, Inc.  
 Hatfield Wire and Cable Div., Continental Copper and Steel Industries, Inc., 407 Hillside Ave., Hillside 5, N. J.  
 HATFLEX—Continental Copper & Steel Indus., Inc., Hatfield Wire & Cable Div.  
 Hatheway & Patterson Co., Inc., 15 County St., Mansfield, Mass.  
 HATSEAL—Hatfield Wire and Cable Div., Continental Copper and Steel Industries, Inc.  
 HATVINOL—Hatfield Wire and Cable Div., Continental Copper and Steel Industries, Inc.  
 Hauck Manufacturing Co., 124-136 Tenth St., Brooklyn 15, New York  
 HAVENS—Klein & Sons, Mathias  
 HAVEN'S GRIP—Klein & Sons, Mathias  
 Hayden Twist Drill Co., 8626 Lyndon St., Detroit 38, Mich.  
 Hayden Company, A. W., 232 North Elm St., Waterbury, Connecticut  
 HAYMOLITE—Stieber Manufacturing Co.  
 Hynes Stellite Co., Div. of Union Carbide and Carbon Corp., 725 S. Lindsay St., Kokomo, Ind.  
 HAYS-COCHRANE—Penn Industrial Instrument Div., Burgess Manning Co., Michican City, Ind.  
 Hays Mfg. Co., Industrial Sales Div., 12th and Liberty Sts., Erie 6, Pa.  
 HAYS-PENN—Penn Industrial Instrument Div., Burgess Manning Co.  
 HAZACORD—Okonite Co.  
 HAZARDCHECK—Westline Products Div., Western Lithograph Co.  
 HAZARDSTRIP—Westline Products Div., Western Lithograph Co.  
 HAZATEL—Okonite Co.  
 HAZEGAGE—Ess Instrument Co.  
 HEALTH BUILDER—Battle Creek Equipment Co.  
 Healy-Ruff Co., Water Level Controls Div., 2255 University Ave., St. Paul 14, Minn.  
 HEART OAK—Graton & Knight Co.  
 HEAT-A-LITE—Nufone, Inc.  
 HEAT FOE—Miller Products Co., Inc.  
 HEAT-R-FAN—Dominion Electric Corp.  
 Heat-Seal-It-Reitzes Co.—see Heat Seal-It Company  
 HEAT-STABILIZER—Minneapolis-Honeywell Regulator Co.  
 HEAT WAGON—Lemmer Furnace Co.  
 Heath Company, 305 Territorial, Benton Harbor, Michigan  
 HEATH KITS—Heath Company  
 HEATMOBILE—Siebring Mfg. Co.  
 Heatmore, Inc., 59 Throop Ave., Brooklyn 6, N. Y.  
 HeatRite, Inc., 311 Fifth Ave. North, Minneapolis 1, Minn.  
 HEATSUM—Roberson Co., L. N.  
 HEETMASTER—Aerol Products Co., Inc.  
 HeatTube Corp., 612 Grand St., Allegan, Mich.  
 HEDGEMASTER—Kaufman Manufacturing Co.

HEET-O-MATIC—Automatic Controls Corp.  
 HEET-X—Continental Copper & Steel Indus., Inc., Hatfield Wire & Cable Div.  
 HEETAIRE—LaSalle Products, Inc.  
 HEETAIRE—Market Electric Products, Inc.  
 Heil Co., 3000 W. Montana St., Milwaukee 1, Wis.  
 Heinemann Electric Co., Penna. Ave. & Plum St., P. O. Box 249, Trenton 2, New Jersey  
 HELE-SHAW—American Engineering Co.  
 HELIARC—Linde Air Products Co.  
 HELIAX—Andrew Corp.  
 Heller Co., 2135 E. Superior Ave., Cleveland 14, Ohio  
 Heller Brothers Co., Heller Dr., Newcomerstown, Ohio  
 HELWIG—Interstate Drop Forge Co.  
 Helwig Co., 2544 N. 30 St., Milwaukee 10, Wis.  
 HELWIG/SPEER—Helwig Co.  
 HEMCO—Siebring Mfg. Co.  
 Henderson Electric Co., Ampere Station, East Orange, New Jersey  
 Henderson-Hazel Corp., 13601 Euclid Ave., Cleveland 12, Ohio  
 Henkel-Clauss Co.—see Clauss Cutlery Co.  
 Henry Electric Co., 1716 S. Jefferson Ave., Saginaw, Mich.  
 Henschel Corp., 14 Cedar St., Amesbury, Massachusetts  
 HERCULES—Cincinnati Pump & Mfg. Co., Inc.  
 HERCULES—Shure Brothers, Inc.  
 HERCULES—Titan Manufacturing Co., Inc.  
 HERCULES—Whitman & Barnes Div., United Drill and Tool Corp.  
 HERCULON—Dossert Mfg. Corp.  
 Hermetic Seal Products Co., 29 S. Sixth St., Newark 7, N. J.  
 HERMICO—Hermetic Seal Products Co.  
 Hertner Electric Co., 12690 Elmwood Ave., N.W., Cleveland 11, Ohio  
 Herwig Co., 1757 Sedgwick St., Chicago 14, Ill.  
 HESS-BRIGHT—S K F Industries, Inc.  
 Hess Co., Inc., Charles, 1951 Flushing Ave., Brooklyn 37, N. Y.  
 Hesse & Co., W. A.—see Hesse Products Co.  
 Hesse Products Co.—600 W. Seventh St., Reno, Nev.  
 Hessel Co., Inc., W. F., 74 Beekman St., N. Y. 38, N. Y.  
 Hetherington, Inc., Sharon Hill, Pa.  
 Hevi Duty Electric Co., 4212 West Highland Blvd., Milwaukee 1, Wisconsin  
 Hewitt-Robins, Inc., 666 Glenbrook Rd., Stamford, Connecticut  
 Hewlett-Packard Co., 395 Page Mill Rd., Palo Alto, Calif.  
 Hewson Co., Inc., 443 Broad St., Newark 2, N. J.  
 Hex Products Co., John—see Hewson Co., Inc.  
 HEX DRIVES—Hunter Sales Co., Inc., R. N.  
 HEX-TEX—Allis-Chalmers Manufacturing Co.  
 Hexacon Electric Co., 161 West Clay Ave., Roselle Park, New Jersey  
 HEXCAST—U. S. Expansion Bolt Co.  
 Hexcel Products, Inc., 951 61st St., Oakland 8, Calif.  
 HEXSEAL—Automatic and Precision Mfg. Co.  
 HEXTHODE—Luxor Lighting Products, Inc.  
 HEYCO—Heyman Manufacturing Co.  
 Heyer Industries, Inc., 471 Cortlandt St., Belleville 9, New Jersey  
 Heyman Mfg. Co., Kenilworth 20, N. J.  
 HI—Holub Industries, Inc.  
 HI-AMP—Wagner Mfg. Co., Inc.  
 HI-BAY—Guth Co., Edwin F.  
 HI-BOY—Industrial Products Co.  
 HI-CLAMPS—Holub Industries, Inc.  
 HI-CYCLE—Continental Electric Co.  
 HI-EFFICIENCY—Chicago Belting Div., Chicago-Allis Mfg. Corp.  
 HI-FLGOD—Radiant Lamp Corp.  
 HI-FLUX—Annis Co., R. B.  
 HI-HAT—Litecraft Mfg. Corp.  
 HI-HEAT—Radiant Lamp Corp.  
 HI-K—Erie Resistor Corp.  
 HI-LASTIC—Macwhearty Company  
 HI-LETIC—Magnusson Power Tool Co.  
 HI-LIFT—Atlas Industrial Corp.  
 HI-LIFT—Minneapolis-Honeywell Regulator Co.  
 HI-LITE—Duro-Test Corp.  
 HI-LITE—Litecraft Manufacturing Corp.  
 HI-LO—Equipment Engineering Co.  
 HI-LO-FLEX—General Lamps Mfg. Corp.  
 HI-NEON—Holub Industries, Inc.  
 HI-PEAK—Acme Industries, Inc.  
 HI POWER—Portable Electric Tools, Inc.  
 HI-PUT—Jackson Products Co.  
 HI-RANGER—Mobile Aerial Towers, Inc.  
 HI-REACH—Economy Engineering Company  
 HI-Scale Products Corp., 217 Centre St., New York 13, New York  
 HI-SPEED—Dackson Corp.  
 HI-SPEED—Holub Industries, Inc.  
 HI-Spec Mfg. Co., Inc., 413 Market St., Newark 5, N. J.  
 HI-SPOT—Radiant Lamp Corp.  
 HI-STAB—Erie Resistor Corp.  
 HI-STRENGTH—Blackburn Corp., Jasper  
 HI TEMP—Rockbestos Products Corp.  
 HI-TEMP—Rome Cable Corp.  
 HI-TEST—Holub Industries, Inc.  
 HI TORQUE—American Pulley Co.  
 HI-TRONIC—Bliss Electronic Corp.  
 HI-TWIST—Holub Industries, Inc.  
 HI-VALUE—Johns-Manville  
 HI-VOLT—Industrial Devices, Inc.  
 HIBAY—Holophone Company, Inc.  
 Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland 8, Ohio  
 HICKORY—Precision Manufacturing Co., Inc.  
 Hicks Battery Mfg. Co.—see Excello Battery Co.  
 HICO—Hastings Instrument Co., Inc.  
 HICYCLE—Chicago Pneumatic Tool Co.  
 HIDE-AWAY—Bryant Heater Div., Affiliated Gas Equip., Inc.  
 HIGH BAY—Curtis Lighting, Inc.  
 HIGH POWER—Magnetic Engineering & Mfg. Co.

HIGH SPEED—Capewell Mfg. Co.  
 High Speed Hammer Co., Inc., 312 Norton St., Rochester 21, N. Y.  
 HIGHLIGHT—Associated Lighting Service  
 Highway Trailer Co., 405 East Fulton St., Edgerton, Wis.  
 HILAG—Ware Fuse Corp.  
 Hilco Engineering Co., Genoa City, Wisconsin  
 Hillside Commutator Co.—see Toledo Commutator Co.  
 HILO—Driver Co., Wilbur B.  
 Hinde Transformer Co., Inc., Woods Church Rd., Flemington, N. J.  
 HINJON—Thomas & Betts Co.  
 HIPCO—Hipwell Mfg. Co.  
 HIPOT—Peschel Electronics, Inc.  
 HIPPO-CLIP—Mueller Electric Co.  
 Hipwell Mfg. Co., 835 W. North Ave., Pittsburgh 33, Pa.  
 Hirschmann-Pahle Co., Inc., 300 Lent Ave., LeRoy, N. Y.  
 HIRSUTE—Johnson Belting Co., Inc.  
 HIRSPED—Thermoid Co.  
 Hittamp Wires, Inc., 26 Windsor Rd., Mineola, L. I., N. Y.  
 HITEST—American Nut & Bolt Fastener Co.  
 Hobart Bros. Affiliate, Motor Generator Corp., Hobart Square, Troy 1, Ohio  
 Hobart Manufacturing Co., Kitchen Aid Div., Troy, Ohio  
 Hobbs Mfg. Co., 26 Salisbury St., Worcester 5, Mass.  
 HOBBY—Carlson & Sullivan, Inc.  
 Hobby & Brown Electronic Corp., Sentry-Lite Div., 55 Front St., Rockville Centre, N. Y.  
 Hodgkins Co., J. F., 140 Water St., Randolph, Gardiner, Maine  
 Hoffman Engineering Corp., Anoka, Minn.  
 Hope Manufacturing Co.—see Matlack Mfg. Co.  
 HOIST-ALL—Coffing Hoist Div., Duff-Norton Co.  
 HOISTLIGHT—Paramount Industries, Inc.  
 Hol-DEM Electric Fencer Co.—see Electric Service Systems, Inc.  
 Holan Corp., J. H., 4100 W. 150 St., Cleveland 11, Ohio  
 HOLD-ARK—Soer Carbon Co.  
 HOLD-FAST—Chance Co., A. B.  
 HOLD-TITE—Titchner & Co., E. H.  
 HOLDA-LITE—Hoffman Engineering Corp.  
 Holdenline Co., 2301 Scranton Rd., Cleveland 13, Ohio  
 HOLDFAST—Ludlow Manufacturing & Sales Co.  
 HOLDTITE—United States Rubber Co.  
 HOLE A MATIC—Multi-Matic Corp.  
 HOE A MINIT—Multi-Matic Corp.  
 HOLGUN—Black & Decker Mfg. Co.  
 HOLIDAY—General Lamps Mfg. Corp.  
 Holland & Sons, Inc., J., 475 Keap St., Brooklyn 11, N. Y.  
 Hollanck Mfg. Co., 342-352 E. 18 St., Erie, Pa.  
 Hollingsworth, John R., Nutt & French Creek Rds., Phoenixville, Pennsylvania  
 Hollister-Whitney Co., 211-227 North Second St., Quincy, Illinois  
 HOLLWOOD—Finders Manufacturing Co.  
 HOLLYTRAN—Transformer Engineers  
 Hollywood Transformer Co.—see Transformer Engineers  
 HOLOFLUX—Holophone Company, Inc.  
 Holophone Co., Inc., 342 Madison Ave., N. Y. 17, N. Y.  
 Holsclaw Bros., Inc., 408 North Willow Rd., Evansville, Indiana  
 HOLTITE—American Brass Co.  
 Holtzer-Cabot Div., National Pneumatic Co., Inc., 125 Amory St., Boston 19, Mass.  
 Holtzer-Cabot Electric Co.—see Holtzer-Cabot Div., National Pneumatic Co., Inc.  
 Holub Industries, Inc., 442 Elm St., Sycamore, Ill.  
 HOLZIN—Star Expansion Bolt Co.  
 HOM-A-LARM—Lord-Taber Co., Inc.  
 HOME EASE—Bogue Electric Mfg. Co.  
 Homecraft Electronic Products, 805 Milwaukee Ave., Chicago, Ill.  
 Homelite Corp., Riverdale Ave., Port Chester, N. Y.  
 HOMEMASTER—Porter-Cable Machine Co.  
 Homer Commutator Co.—see Toledo Commutator Co.  
 Honan Crane Corp.—see Houdaille-Hershey of Indiana, Inc., Filtration Div.  
 Homer Mfg. Co.—see Bell Electric Co.  
 Honeycutt Mfg. Co., Inc., 2715 Oak St., Kansas City 8, Mo.  
 HONEYLITE—Hexcel Products, Inc.  
 HOOSIER—Flint & Walling Mfg. Co., Inc.  
 Hoover Co., Electric Motor Div., 68 Brook Ave., North Plainfield, N. J.  
 Hopax Electric, Inc., 547 Greenwich St., N. Y. 13, N. Y.  
 HOPE—Magnetic Engineering & Mfg. Co.  
 Hope Electrical Products Co., Inc., 338 Wilson Ave., Newark 5, New Jersey  
 HORSE HEAD—New Jersey Zinc Co.  
 Hose-Cann Corp.—see Hose-McCann Telephone Co., Inc.  
 Hose-McCann Telephone Co., Inc., 25th St. & 3rd Ave., Brooklyn 32, N. Y.  
 HOSPITALITY LIGHT—Versen Co., Kurt  
 Hossfeld Mfg. Co., 460 W. Third St., Winona, Minn.  
 HOSTESS—Jordan Refrigerator Co., Inc.  
 HOT-MAID—Etriglas Corp.  
 HOT ROD—Pyrosil, Inc.  
 HOT SPOT—Acme Electric Welder Co.  
 HOTABLE—Salton Mfg. Co., Inc.  
 HOTIP—Contact, Inc.  
 HOTKOTE—Mark & Co., Clayton  
 HOTPACK—Electric Hotpack Co., Inc.  
 Hotpot Co., 5600 W. Taylor St., Chicago 44, Ill.  
 Hotpot Co., Commercial Equipment Dept., 227 S. Seeley Ave., Chicago 12, Ill.  
 HOTRAY—Salton Mfg. Co., Inc.  
 HOTSPARK—Champion Cable Co.  
 Houdaille-Hershey of Indiana, Inc., Filtration Div., 415 Indianapolis Ave., Lebanon, Ind.



House-O-Lite Corp., 2430 S. Ashland Ave., Phila. 11, Pa.  
 HOW-ELL-DOR—Howell Mfg. Co.  
 Howard Electric, 1700 N. Kostner Ave., Chicago 39, Ill.  
 HOWARDUCT—Howard Electric  
 Howard Industries, Inc., 1760 State St., Racine, Wis.  
 Howard Refrigerator Co., Inc., 4745 Worth St., Philadelphia 24, Pennsylvania  
 Howell Electric Motors Co., 409 North Roosevelt St., Howell, Michigan  
 Howell Mfg. Co., Cottman St. & Haisbrook Ave., Phila. 11, Pa.  
 HOWES—Klein & Sons, Mathias  
 Hoyt—Burton-Rogers Company  
 Hoyt Electric Instrument Works, Inc.—see Burton-Rogers Co.  
 Hoyt Manufacturing Corp., Forge Rd., Westport, Massachusetts  
 Hub Electric Co., 2255 W. Grand Ave., Chicago 12, Ill.  
 Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa.  
 HUBBELL—Electric Heater Co.  
 Hubbell, Inc., Harvey State & Bostwick Ave., Bridgeport 2, Connecticut  
 HUBBELLOCK—Hubbell, Inc., Harvey  
 HUBEYE—Hubbard & Co.  
 HUBRAK—Hubbard & Co.  
 Hudson Lamp Co., 528 Elm St., Arlington, New Jersey  
 Huenefeld Co., Engineered Products Div., 2701 Spring Grove Ave., Cincinnati 25, Ohio  
 Hughes Bros. Inc., Seward, Neb.  
 Hugley & Phillips, Inc., 3500 N. San Fernando Blvd., Burbank, Calif.  
 Hulthorst Micro-Tool Co.—see Hulthorst Tools, Inc.  
 Hulthorst Tools, Inc., 1915 Nebraska Ave., Toledo 7, Ohio  
 HUMID-I-METER—Walton Laboratories, Inc.  
 HUMID-U-STAT—Minneapolis-Honeywell Regulator Co.  
 Hunter & Co., H. D.—see Hunter Tools  
 HUMIDIGRAPH—Bristol Company  
 Hunter Fan & Ventilating Co., 400 South Front St., Memphis 2, Tennessee  
 Hunter Sales Co., Inc., R. N.—see Hunter Tools  
 Hunter Tools, 6608 S. Gretna Ave., Whittier, Calif.  
 HUNTSMAN—Kedman Co.  
 Hupp Corp., Globe Stamping Div., 1250 W. 76 St., Cleveland 2, Ohio  
 Hupp Motor Car Corp.—see Hupp Corp., Globe Stamping Div.  
 HUPP-WATTSAUER—Globe Stamping Div., Hupp Corp.  
 Huppert Company, K. H., 6830 South Cottage Grove Ave., Chicago 37, Illinois  
 HUSHMUSH—Carey Mfg. Co., Philip  
 HUSKIE—Mercury Manufacturing Co.  
 HUSKY—Berkshire Electric Cable Co.  
 HUSKY—Price Electric Corp.  
 Husky Products, Inc., 5300 Vine St., Cincinnati 17, Ohio  
 Hussey & Co., C. G., 2850 Second Ave., Pittsburgh 19, Pa.  
 HY-CAP—Illinois Condenser Co.  
 HY-DUTY—Schwitzer-Cummins Co.  
 HY-LOAD—Hyatt Bearings Div., General Motors Corp.  
 HY-LITER—Guth Co., Edwin F.  
 HY-SOL—Charleston Rubber Co.  
 HY-TIN—Farrelly Company  
 HY-VO—Morse Chain Company  
 Hyatt Bearings Div., General Motors Corp., Harrison, N. J.  
 HYCASTE—Chisholm-Ryder Co., Inc., Premax Products Div.  
 HYDENT—Burdny Engineering Co., Inc.  
 HYDIS—Line Material Co.  
 HYDRA-CUT—Seerless Machine Co.  
 HYDRAGRIP—Armstrong-Bray & Co.  
 HYDRAKOTE—Hatfield Wire and Cable Div., Continental Copper and Steel Industries, Inc.  
 HYDRALLOY—Olun Co., A. L.  
 HYDRAMITE—American Engineering Co.  
 HYDRATEMP—Hatfield Wire and Cable Div., Continental Copper and Steel Industries, Inc.  
 HYDRATUBE—Recora Co.  
 HYDRO—Maxwell Equipment Co.  
 HYDRO-FLO—Bell & Gossett Co.  
 HYDRO-THERM—Paranite Wire & Cable Div., Essex Wire Corp.  
 HYDRO-VOLIFIER—Bowler, Inc.  
 HYDROBALANCE—LaBour Company, Inc.  
 Hydroban, Inc.—see Central Paint & Varnish Works, Inc.  
 HYDROGARDE—Pyrene Manufacturing Co.  
 HYDROHOT—Sepco Corp.  
 HYDROELECTRIC—Lift Trucks, Inc.  
 HYDROLIFT—Lift Trucks, Inc.  
 HYDROSEAL—Paranite Wire & Cable Div., Essex Wire Corp.  
 HYDUTY—Davidson Fan Co.  
 HYDLUX ALNICO V—Indiana Steel Products Co.  
 HYGEAIRE—Sanitron, Inc.  
 HYGRADE—Foote Bros. Gear & Machine Corp.  
 Hykon Manufacturing Co., 163 East State St., P. O. Box 923, Alliance, Ohio  
 HYLINK—Burdny Engineering Company, Inc.  
 HYLUG—Burdny Engineering Company, Inc.  
 HYPERSIL—Westinghouse Electric Corp.  
 HYPERVAC—Central Scientific Co.  
 HYPOT—Associated Research, Inc.  
 HYPPRESS—Burdny Engineering Company, Inc.  
 Hypo Engineering, Inc., 700 39th Ave., N.E., Minneapolis 21, Minn.  
 HYSAPAR—Midland Paint & Varnish Co.  
 HYSPLICE—Burdny Engineering Co., Inc.  
 Hyster Company, 2902 Northeast Clackamas, Portland 8, Oregon  
 HYSTERSET—Ward Leonard Electric Co.  
 HYTAFFIL—General Electric Co., X-Ray Dept.  
 HYTOOL—Burdny Engineering Company, Inc.

HYTORK—Allis-Chalmers Mfg. Co.  
 HYTRON—Columbia Broadcasting System, Inc., CBS-Hytron Div.  
 HYVAC—Central Scientific Co.  
 IBM—International Business Machines Corp.  
 ICA—Insuline Corp. America  
 IDI—Industrial Devices, Inc.  
 IEP—Illinois Electric Porcelain Co.  
 I-EZE—Artistic Lamp Mfg. Co., Inc.  
 ILC—Industrial Lamp Corp.  
 IMC—Insulation Manufacturers Corp.  
 I-T-E Circuit Breaker Co., 19th & Hamilton Sts., Philadelphia 30, Pennsylvania  
 I-T-E Circuit Breaker Co., Victor Insulator Div., Victor, N. Y.  
 IWI—Insulation & Wires, Inc.  
 Ideal Alarm and Signal Co., 204 Franklin St. (Box 255), Danville, Ill.  
 Ideal Commutator Dresser Co.—see Ideal Industries, Inc.  
 Ideal Electric & Manufacturing Co., East First St., Mansfield, Ohio  
 Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill.  
 IEFECO—International Electric Fence Co., Inc.  
 Iig Electric Ventilating Co., 2850 N. Palaski Rd., Chicago 41, Ill.  
 ILLINI—Illinois Condenser Co.  
 Illinois Condenser Co., 1616 N. Throop St., Chicago 22, Ill.  
 Illinois Electric Porcelain Co., 510 N. Pearl St., Macomb, Ill.  
 Illinois Iron & Bolt Co., Carpentersville, Illinois  
 Illinois Testing Laboratories, Inc., 420 North La Salle St., Chicago 10, Illinois  
 Illinois Tool Works, Shakeproof Div., St. Charles Rd., Elgin, Ill.  
 Illuminating Engineering Co., 2347 East Nine Mile Rd., Hazel Park, Michigan  
 Ilco Copper Tube & Products, Inc.—see Ilco Corp.  
 Ilco Corp., 5751 Mariemont Ave., Cincinnati 27, Ohio  
 IMCO—Interstate Mfg. Corp.  
 IMP—Pyramid Electric Co.  
 IMP—Superior Insulating Tape Co.  
 IMPACTOOL—Ingersoll-Rand  
 IMPERIAL—Chicago Belting Div., Chicago-Allis Mfg. Corp.  
 Imperial Lighting Products, Latrobe, Pa.  
 IMPERIALITE—Imperial Lighting Products Co.  
 IMPERVEX—Crescent Insulated Wire & Cable Co.  
 IMPROV-A-LITE—General Electric Co., Wiring Device Dept.  
 IMPRUVOL—Koppers Co., Inc.  
 IN-A-GRIP—Stevens Walden, Inc.  
 IN-BILT—Holophane Company, Inc.  
 IN-RES-CO—Instrument Resistors Co.  
 INCH-MARKED—Republic Steel Corp., Steel & Tubes Div.  
 Incinator Co. of America, 2200 Paxton St., Harrisburg, Pa.  
 INDALLOY—Indiana Steel Products Co.  
 INDECO—Industrial Engineering & Equip. Co., Inc.  
 Independent Pneumatic Tool Co.—see Thor Power Tool Co.  
 Independent Products Co.—see Independent Protection Co., Inc.  
 Independent Protection Co., Inc., 1605-07 S. Main St., Goshen, Ind.  
 INDESTRUCTO—National Electric Products Corp.  
 Indiana Permanent Magnets—see Indiana Steel Products Co.  
 Indiana Steel Products Co., Valparaiso, Indiana  
 INDOX—Indiana Steel Products Co.  
 INDUCTALL—Westinghouse Electric Corp.  
 Induction Heating Corp., 181 Wythe Ave., Brooklyn 11, N. Y.  
 INDUCTRONIC—Weston Electrical Instrument Corp.  
 Indus Corp., 1815 Madison Ave., Indianapolis 25, Ind.  
 INDUSPRAYOR—Tangefoot Co.  
 Industrial Chromium Corp., Plating Processes Co. Div., 109 Lyman St., Holyoke, Mass.  
 Industrial Devices, Inc., Edgewater 19, N. J.  
 Industrial Electric Mfg. Co.—see HeatTube Co.  
 Industrial Electrical Works, 1509 Chicago St., Omaha, Nebraska  
 Industrial Electronics and Transformer Co.—see INET, Inc.  
 Industrial Engineering Equip. Co., 122-124 East Fourth St., Davenport, Iowa  
 Industrial Engineering & Equipment Co., Inc., 711 S. Theresa, St. Louis 3, Mo.  
 Industrial Instrument Co.—see Seely Instrument Co., Inc.  
 Industrial Instruments, Inc., 89 Commerce Rd., Cedar Grove, New Jersey  
 Industrial Lamp Corp., 14th & Blaine Sts., Elkhart, Indiana  
 Industrial Products Co., 2695 North Fourth St., Philadelphia 33, Pennsylvania  
 Industrial Tape Corp.—see Permacel Tape Corp.  
 Industrial Transformer Corp., Goldsboro, Pennsylvania  
 INDUSTRIALINER—Duro-Test Corp.  
 INDUSTRIALITER—Duro-Test Corp.  
 INDUSTRIALIST—Curtis Lighting, Inc.  
 INDUSTRIALIST—Duro-Test Corp.  
 INERTAIRE—Westinghouse Electric Corp.  
 INERTARC—Lincoln Electric Co.  
 INERTEEN—Westinghouse Electric Corp.  
 INET, Inc., 4441 S. Santa Fe, Vernon, Calif.  
 Inferno Co., 115 Ricou St., Shreveport, La.  
 Infraglass Heater Co., Inc., 350 S. Sanford, Pontiac, Mich.  
 Ingersoll-Rand Co., 11 Broadway, New York 4, N. Y.  
 INHIBISOL—Penetone Co.  
 INKIE—Condi-Lite Corp.

INLINE—American Phenolic Corp.  
 INMANCO—Insulation Manufacturers Corp.  
 INSA-LUTE—Sawers Cements Company  
 INSANOL—Westinghouse Electric Corp.  
 INSECT-O-CUTOR—Gardner Mfg. Co.  
 INSECTO—Solar Electric Corp.  
 Insectocutor Corp.—see Detjen Corp., Electrocuting Fly Screen Div.  
 INSOLUSEAL—Anacosta Wire & Cable Co.  
 INSPIRATION—United States Rubber Co.  
 INSTA-LITE—Pressure Can Corp.  
 INSTA-START—France Manufacturing Co.  
 INSTAN-FORM—TelAutograph Corp.  
 INSTANSOLDER—Cole Radio Works  
 INSTITUBE—Union Asbestos & Rubber Co.  
 Insto-Gas Corp., 1977 East Woodbridge St., Detroit 7, Michigan  
 INSTRFO—Cope, Inc., T. J.  
 Instrument Development Labs—see Nuclear-Instrument & Chemical Corp.  
 Instrument Laboratories, 315 W. Walton Pl., Chicago 10, Ill.  
 Instrument Laboratories, Stewart Bros. Div., 315 W. Walton Pl., Chicago 10, Ill.  
 Instrument Resistors Co., 1036 Commerce Ave., Union, N. J.  
 Instrument Sales Corp.—see Bourns Laboratories  
 Insul-8 Corp., 1285 Rollins Rd., Burlingame, California  
 INSUL-LOK—Anthony Co., F. M.  
 INSUL-PIN—Graham Mfg. Corp.  
 Insulated Duct & Cable Co., Inc., Homestead & Stokes Ave., Trenton 5, N. J.  
 Insulation Manufacturers Corp., 565 West Washington Blvd., Chicago 6, Illinois  
 Insulation & Wires, Inc., 3435 Chouteau Ave., St. Louis 3, Missouri  
 INSULFOAM—Westinghouse Electric Corp.  
 Insuline Corp. of America, 186 Granite St., Manchester, N. H.  
 INSULINER—Thomas & Betts Co.  
 INSULUG—Burdny Engineering Company, Inc.  
 INTELIN—Federal Telephone & Radio Corp.  
 INTENS—Appleton Electric Co.  
 INTER-MATIC—International Register Co.  
 INTERLOCK—Hubbell, Inc., Harvey  
 INTERNATIONAL—Detjen Corp., Electrocuting Fly Screen Div.  
 INTERNATIONAL—Republic Metals Co.  
 International Business Machines Corp., 590 Madison Ave., New York 22, New York  
 International Clay Machinery Co.—see International Engineering, Inc.  
 International Crossarm Co., Inc., Ft. Cornwall Ave., Bldg. 6, (P. O. Box 1075), Bellingham, Washington  
 International Electric Fence Co., Inc., 924 Albany St., P. O. Box 252, Caldwell, Idaho  
 International Engineering, Inc., P. O. Box 973, Dayton 1, Ohio  
 International Graphite & Electrode Corp.—see International Graphite & Electrode Div., Speer Carbon Co.  
 International Graphite & Electrode Div., Speer Carbon Co., Theresa St., St. Marys, Pa.  
 International Harvester Co., 180 N. Michigan Ave., Chicago 1, Ill.  
 International Instruments, Inc., P. O. Box 2954, New Haven 15, Connecticut  
 International Lighting Mfg. Co., 6511 Easton Ave., St. Louis 14, Mo.  
 International Oil Burner Co., Fan Div., 3800 Park Ave., St. Louis 10, Mo.  
 International Rare Metals Refinery—see Canadian Radium & Uranium Corp.  
 International Register Co., 2620 West Washington Blvd., Chicago 12, Illinois  
 International Resistance Co., 401 North Broad St., Philadelphia 6, Pennsylvania  
 International Rolling Mill Products Corp., Nikoh Tube Co. Div., 5000 S. Whipple St., Chicago 32, Ill.  
 International Seal & Knet Protector Co., 109-111 Spring St., New York 12, N. Y.  
 International Telephone & Telegraph Corp., Coolerator Co. Div., P. O. Box 399, Duluth, Minn.  
 International Telephone and Telegraph Corp., Federal Telephone and Radio Co. Div., 100 Kingsland Rd., Clifton, N. J.  
 International Telephone and Telegraph Corp., Kellogg Switchboard and Supply Co. Div., 6650 S. Cicero Ave., Chicago 38, Ill.  
 Interstate Drop Forge Co., Special Products Div., 4051 North 27 St., Milwaukee 16, Wisconsin  
 Interstate Mfg. Corp., 26 Sterling St., East Orange, N. J.  
 Interstate Rubber Products Corp., 908 Avila St., Los Angeles 12, Calif.  
 INVERTOLITE—Adjustable Fixture Co.  
 Invinible Vacuum Cleaner Mfg. Co., Dover, Ohio  
 INVISIBLE DOR-MAN—Dor-O-Matic Div., Republic Industries, Inc.  
 Iona Ventilator Co., Inc., 2821-29 West Dauphin St., Philadelphia 32, Pennsylvania  
 IONAIRE—Wesix Electric Heater Co.  
 IONIX—Wesix Electric Heater Co.  
 IONOTRON—United States Radium Corp.  
 IPOCO—Industrial Products Co.  
 IRON CLAD—Boston Woven Hose & Rubber Co.  
 IRON CLAD—Everett, Inc., E. A.  
 Iron Fireman Manufacturing Co., 3170 West 106 St., Cleveland 11, Ohio  
 Iron Fireman Manufacturing Co., Electronics Div., 2838 Southeast Ninth Ave., Portland 2, Oregon  
 IRON GRIP—Equipto Div., Aurora Equipment Co.  
 Ironbound Box & Lumber Co., 42 Hoffman Place, Hillside, New Jersey  
 Ironbound Operating Co., 110 Polk St., Newark 5, N. J.  
 IRONCLAD—Electric Storage Battery Co.  
 Ironrite, Inc., 332 Cass Ave., Mount Clemens, Michigan  
 IROX—Subox, Inc.



# COMPANY AND TRADE NAME DIRECTORY

Irrington Varnish & Insulator Div., Minnesota Mining & Mfg. Co., 6 Argyle Terrace, Irvington 11, N. J.  
Irwin Auger Bit Co., 92 Grant St., Wilmington, Ohio  
ISATRON—Consolidated Engineering Corp.  
Isert Co., John H.—see Queen Products Co., Inc.  
ISO-PLANE—Motorola Communications & Electronics, Inc.  
ISOGROMMET—MB Manufacturing Co., Inc.  
ISONICA—Mica Insulator Co.  
IVANHOE—Miller Company  
IVCO—Iona Ventilator Co., Inc.  
IVORY-X—Pass & Seymour, Inc.

## J

"V" LINE—Lint, Clyde W.  
J-B-T Instruments, Inc., 441 Chapel St., New Haven 8, Conn.  
JFS-JR.—Standard Transmission Equipment Co.  
JR—Jerrold Electronics Corp.  
JRP—Jerrold Electronics Corp.  
J-W—Johnson-Williams, Ltd.  
JACK FROST—McKay Chemical Co., Inc.  
Jack & Heintz, Inc., 17600 Broadway, Cleveland 1, Ohio  
JACKLIFT—Lewis-Shepard Products, Inc.  
JACKSON—Vulcan Electric Co.  
Jackson Electrical Company, 900 West Van Buren St., Chicago 7, Illinois  
Jackson Electrical Instrument Co., 18 S. Patterson Blvd., Dayton 2, Ohio  
Jackson Mfg. Co., Inc., W. L., 1222 E. 40 St., Chattanooga, Tenn.  
Jackson Products Co., 3703 East 93 St., Cleveland 5, Ohio  
JACKSTACKER—Lewis-Shepard Products, Inc.  
JACKTRACTOR—Lewis-Shepard Products, Inc.  
JACQUES—Hobbs Manufacturing Co.  
JAGABI—Biddle Co., James G. James, Inc., Box 449, Independence, Kans.  
James Mfg. Co., Inc.—see James, Inc.  
Janette Electric Mfg. Co., Lehigh at Main, Merton Grove, Illinois  
Janette Mfg. Co.—see Janette Electric Mfg. Co.  
JAQUET—Sticht Co., Inc., Herman H. JAVABOND—Javes  
Javes, P. O. Box 646, Redlands, California  
Jay Brother Co., 32-14 Northern Blvd., Long Island City 1, N. Y.  
JAY-KAY—All-Steel Equipment Inc.  
Jay Kay Metal Specialties—see Jay Brother Co.  
Jay Lighting Mfg. Co., Inc., 23-29 Quincy St., Brooklyn 38, N. Y.  
Jay Mfg. Co.—see Burbank Electrical Products  
JEEP—Mercury Manufacturing Co.  
Jefferson Electric Co., 25th & Madison, Bellwood, Illinois  
Jefferson Engineering & Mfg. Co., 269 Walker St., Detroit 7, Michigan  
Jeffrey Mfg. Co., Columbus 16, Ohio  
Jeffries Transformer Co., 1710 East 57th St., Los Angeles 58, California  
JEMCO—Jefferson Engineering & Mfg. Co.  
Jenkins Bros., Rubber Div., 100 Park Ave., New York 17, N. Y.  
Jenn Air Products Co., Inc., 333 North Pennsylvania St., Rm. 409, Indianapolis 4, Indiana  
Jensen Specialties, Inc., 9331 Freeland Ave., Detroit 28, Michigan  
Jerrold Electronics Corp., Northeast Corner 26th & Dickinson Sts., Philadelphia 46, Pennsylvania  
JET-EDGE—Millers Falls Co.  
JETWELD—Lincoln Electric Co.  
JEWEL—Dependable-Elec. Mfg. Co. Inc.  
JIFFY—Ambory Corp.  
JIFFY—Lint Company, Clyde W.  
JIFFY—Mineralia Electric Co.  
JIFFY LITE—Rex Electric Mfg. Co.  
JIM BLOCK—Oceanic Electric Products Corp.  
JOE MASTER—Olin Industries, Inc., Ramset Div., John-Manville, 22 East 40th St., New York 16, New York  
JOHNSON—Electrical Distributors Co.  
Johnson Co., E. F., Waseca, Minn.  
Johnson Co., Lloyd S.—see Johnson Mfg. Co., Inc.  
Johnson Belting Co., Inc., 34-44 Hubert St., New York 13, New York  
Johnson Bronze Co., 490 S. Mill St., New Castle, Pa.  
Johnson Mfg. Co., Inc., 600 Anamosa Rd., Mt. Vernon, Iowa  
Johnson Metal Hose, Inc., 10 Sperry St., Waterbury 20, Conn.  
Johnson-Williams Ltd., 2625 Park Blvd., Palo Alto, Calif.  
Johnston Felt Mfg. Co., 6106 S. Broadway, St. Louis 11, Mo.  
JOINTED-ARM—Woodward Machine Co., Lighting Div.  
Joleco Corp., 2513 Baldwin St., St. Louis 6, Mo.  
JOMANCO—Johns-Manville  
JOMKO—Republic Metals Co.  
Jones Metal Products Co., Abolite Lighting Div., West Lafayette, Ohio  
Jones Motrola Corp., 432 Fairfield Ave., Stamford, Conn.  
Jordan Co., 51st & Merrimac Ave., Chicago 38, Ill.  
Jordan Bros. Inc., 74 Beekman St., New York 38, New York  
Jordan Electrical Mfg. Co., Div. of Electric Storage Battery Co., 222-228 N. 2nd St., Minneapolis 1, Minn.  
Jordan Electronic Mfg. Co. Inc.—see Jordan Electronics, Inc.  
Jordan Electronics, Inc., 3025 W. Mission Rd., Alhambra, Calif.  
Jordan Refrigerator Co., Inc., 7900 Tabor Rd., Phila. 21, Pa.  
Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill.\*

Joy Mfg. Co., H. W. Oliver Bldg., Pittsburgh 22, Pa.  
Joy Mfg. Co., Electrical Connector Div., 1201 Mack-Ind Ave., St. Louis 10, Mo.  
JUICEX—Drachberg Products Mfg. Co.  
JUMBO—Oceanic Electric Products Corp.  
JUMBO PLATE—Sierra Electric Corp.  
JUST-RITE—Dominion Electric Corp.  
Justrite Mfg. Co., 2061 North Southport Ave., Chicago 14, Illinois\*

## K

K-LINE—Kraemer & Co., Inc.  
K-LITE—Kalsan Electric Co., Inc.  
K & B—Kirk & Blum Mfg. Co.  
K-E—Kirkman Engineering Corp.  
K-E Sales Corp., P. O. Box 2228 Gardner Station, St. Louis 9, Mo.  
K&H—Krueger & Hudepohl  
K&K Sales—Kunth Engineering Co.  
K. O.—Surbank Electrical Products  
K—Chance Co., A. B.  
K-R—Krusse-Rieck  
KS-1—Kees Mfg. Co., F. D.  
K-S-V—Arex Company  
K. W. Battery Co., Inc., 3555 Howard St., Skokie, Ill.  
KABLE KORD—New York Belting & Packing Co.  
Kaiser Aluminum & Chemical Sales, Inc., 919 N. Michigan Ave., Chicago 11, Ill.  
Kalamazoo Tank & Silo Co., Machine Tool Div., 500 Harrison St., Kalamazoo 16, Mich.  
Kalsan Electric Co., Inc., 30 Moti St., Oceanside, L. I., N. Y.  
KANTARK—Trico Fuse Manufacturing Co.  
KANTLINK—Positive Lock Washer Co.  
KARAK—Ohio Carbon Co.  
KARBATE—National Carbon Co.  
Karen Corp., Maple Ave., Philmont, N. Y.  
Karp Metal Products Co., 233 63rd St., Brooklyn 20, N. Y.  
KARRI-GO—Silent Hoist & Crane Co.  
KARROPAK—Felt Products Mfg. Co.  
KARRYKRANE—Hyster Co.  
KART-O-MATIC—Columbia Industries, Inc.  
Kas-Kel Electric Co. Inc., 5 Union Square, New York 3, New York  
KASKORD—Kas-Kel Electric Co. Inc.  
Kastar, Inc., 200-208 Lincoln Ave., N. Y. 54, N. Y.  
KATHANODE—Gould-National Batteries, Inc.  
Kato Engineering Co., Mankato, Minn.  
Katolight Corp., First Ave. at Chestnut (P. O. Box 891), Mankato, Minn.  
Kauffman Air Conditioning Co., 4505 Olive St., St. Louis, Missouri  
Kauffman Co., H. J., 13215 Roselawn Ave., Detroit 38, Mich.  
Kauffman Manufacturing Co., 29th & Meadow Lane, Manitowoc, Wisconsin  
KAULDRON—Meynell Mfg. Co.  
KAY-KUL—McKay Chemical Co., Inc.  
Kay Lab, 5725 Kearney Villa Rd., San Diego 12, Calif.  
KAYGREY—Rogers Corp.  
Kayline Company, 2480 East 22 St., Cleveland 15, Ohio  
KAYPAR—Rogers Corp.  
Kearney, Quintin James, 220 Congress Ave., Lansdowne, Pa.\*  
Kearney Corp., James R., 4236 Clayton Ave., St. Louis 10, Mo.  
Keasbey & Mattison Co., Butler Ave., Ambler, Penn.  
Kecley Co., O. C., 400 W. Madison St., Chicago 6, Ill.  
KECO—Kuhlman Electric Co.  
Kedman Co., 233 S. Fifth West St., Salt Lake City, Utah  
KEELER POLYGRAPH—Associated Research Inc.  
KEEN ARC—Becker Bros Carbon Co.  
Kees Mfg. Co., F. D., P. O. Box 537, Beatrice, Neb.  
KEIL—Trine Mfg. Corp.  
KELCO—Kneisley Electric Co.  
KELF—Electronic Mechanics Inc.  
Kellens Company, 15 Williams St., Stonington, Connecticut  
Kellens Products, Inc.—see Kellens Co.  
Kellogg Switchboard and Supply Co., Div. of International Telephone and Telegraph Corp., 6650 S. Cicero Ave., Chicago 38, Ill.\*  
Kelly Specialty Co., 5958-60 Washington Blvd., Chicago 44, Ill.  
KELVINATOR—Ebec Mfg. Co.  
KEM—Sherwin-Williams Co.  
KEM-LUSTRAL—Sherwin-Williams Co.  
Kemco Industries—see Knapp Monarch Co.  
Kemiite Laboratories, 1817 W. Grand Ave., Chicago, Ill.  
KEN-AIRE—Argo Products Co.  
KEN-RAD—Westinghouse Electric Corp., Lamp Div.  
Kendall Co., Polyken Products Dept., 222 West Adams St., Chicago 6, Illinois  
KENNADRILL—Kennametal Inc.  
Kennametal, Inc., Latrobe, Pa.  
KENNEBRONZE—Hodgkins Co., J. F.  
KENNECOTT—Chase Brass & Copper Co., Inc.  
Kennecott Wire & Cable Co., Bourne Ave., Phillipsdale (Rumford 16), Rhode Island  
KENNELDY—Hodgkins Co., J. F.  
Kent Company, Inc., 359 Canal St., Rome, New York  
Kent Extinguisher Co., 830 Front N. W., Grand Rapids 4, Michigan  
Kent Metal Manufacturing Co., Inc., 490 Johnson Ave., Brooklyn 37, New York  
Kenworth Motor Truck Corp.—see Pacific Car and Foundry Co.  
KENYCAS—Central Paint & Varnish Werks Inc.  
KEP—Shakeproof Div., Illinois Tool Works  
Kepco Laboratories, 131-38 Sanford Ave., Flushing 55, N. Y.

KEPS—Illinois Tool Works, Shakeproof Div.  
KESCO—K-E Sales Corp.  
Kester Solder Company, 4201 Wrightwood Ave., Chicago 39, Illinois  
KETOS—Crucible Steel Co. of America  
Kett Appliance Co.—see Kett Tool Co.  
Kett Tool Co., 5 East Third St., Cincinnati 2, Ohio  
Key-Hak Corp.—see Producers and Distributors, Inc.  
Key-Hak Products Co.—see Producers and Distributors, Inc.  
Keyes-Davis Co., 74-14th St., Battle Creek, Mich.  
KEYNOTE—Edwards Co., Inc.  
KEYSTONE—Diamond Expansion Bolt Co., Inc.  
KEYSTONE—Disston & Sons, Inc., Henry  
KEYSTONE—Electric Service Manufacturing Company  
KEYSTONE—Erie City Iron Works  
KEYSTONE—Fullman Manufacturing Co.  
KEYSTONE—Hollands Manufacturing Co.  
Keystone Carbon Co., Inc., 1935 State St., St. Marys, Pa.  
Keystone Electric Mfg. Co., 2228 East Tioga St., Philadelphia 34, Pennsylvania  
Keystone Electronics Corp., 423 Broome St., New York 13, N. Y.  
Keystone Mfg. Co., 23328 Sherwood Rd., Centerline, Detroit, Mich.  
Keystone Silver Inc., 509 West 34 St., New York 1, New York  
Kickhafer Mfg. Co., 901 S. Second St., Milwaukee 4, Wis.\*  
Kilde & Co., Inc., Walter, 459 Main St., Belleville 9, N. J.  
Kieckhefer Elevator Co., A., 1100 W. St. Paul Ave., Milwaukee 3, Wis.  
Kilbury Mfg. Co., Inc., 14529 Hawthorne Blvd., Lawndale, Calif.  
Killark Electric Mfg. Co., 3940 Easton Ave., St. Louis 13, Mo.  
KILOTRON—Electric Arc, Inc.  
Kimble Electric Co.—see Star-Kimble Motor Div., Michie Printing Press & Mfg. Co.  
Kimble Glass Co., Subsidiary of Owens-Illinois Glass Co., Box 1035, Toledo 1, Ohio  
Kindorf Co.—see Steel City Electric Co.  
KING—Curtis Lighting, Inc.  
KING—Partrick & Wilkins Co.  
King Refrigerator Corp., 76-02 Woodhaven Blvd., Glendale 27, N. Y.  
King-Wyse, Inc., Archbold, Ohio  
Kingston-Conley Electric Co.—see Hoover Co., Electric Motor Div.  
Kinner Mfg. Co., Fields Ave., Columbus 16, Ohio  
Kinney Electrical Manufacturing Co., 678 Buckeye, Elgin, Illinois  
KIPP & ZONEN—Biddle Co., James G.  
Kirby Electric Sales Corp.—see K-E Sale Corp.  
Kirchberger & Co., Inc., M., 83-91 W. Forest Ave., Englewood, N. J.  
Kirk & Blum Mfg. Co., 3120 Forrer St., Cincinnati 9, Ohio  
Kirkland Co., H. R., 8 King St., Morristown, New Jersey  
Kirkman Engineering Corp., 123 Mercer St., New York 12, New York  
KIRKWOOD—Wisconsin Carbon Corp.  
Kirkwood Carbon Corp., 4832 Ridge Rd., Cleveland 9, Ohio  
Kirkwood Commutator Co., 4855 W. 130 St., Cleveland 11, Ohio  
Kirlin Company, 3435 East Jefferson Ave., Detroit 7, Michigan  
Kisco Company, Inc., 2400-40 DeKalb St., St. Louis 4, Missouri  
Kitchen Aid Div., Hobart Mfg. Co., Troy, Ohio  
KITCHEW-AIRE—Stewart Mfg. Co., Inc.  
KLAMP-SWITCH FUZ—Adam Electric Co., Frank Klee Co., George B.—see Dana Fan & Blower Corp.  
KLEEN KUT—Superior Insulating Tape Co.  
KLEEN VU—Neo-Ray Products, Inc.  
KLEENLINE—Friedrich Refrigerators Inc.  
KLEERVUE—Friedrich Refrigerators Inc.  
KLEIN-LINE—Klein & Sons, Mathias  
Klein & Sons, Mathias, 7200 McCormack Rd., Chicago 45, Ill.  
KLEIN-KOAT—Klein & Sons, Mathias  
Kliegel Bros. Universal Electric Stage Lighting Co., Inc., 321 West 50th St., New York 19, New York  
KLIEGLIGHT—Kliegel Bros.  
Kligite Mfg. Co., 316 Delancey St., Phila. 6, Pa.  
Kline, Savage Co., Inc., 163 N. Third St., Phila. 6, Pa.  
KLIPLOK—Trico Fuse Manufacturing Co.  
KLIPTITE—Kalka Electric Mfg. Co. Inc.  
KLOSD—Sterling Electric Motors, Inc.  
KLOSD-TITE—Sterling Electric Motors, Inc.  
KLOZ-A-LITE—Slater Electric & Mfg. Co. Inc.  
Knapp Co., Inc., James H., 839 East Fourth St., Los Angeles 13, California  
Knapp-Monarch Co., Bent & Potomac, St. Louis 16, Mo.  
Kneisley Electric Co., 2501-2509 Lorange St., Toledo 3, Ohio  
KNI-TRON—Kneisley Electric Co.  
Knight Electrical Products Corp., 168 Van Brunt St., Brooklyn 31, New York  
KNOCK-OUT—Lee Company, K. O.  
KNOPP—Electrical Facilities, Inc.  
Knox Porcelain Corp., 2706 Mynders Ave., P. O. Box 2031, Knoxville 3, Tennessee  
Knuth Engineering Co., 2617 North St., St. Louis Ave., Chicago 47, Illinois  
Koch & Co., Paul W.—see Lint, Clyde W.  
Koch Refrigerators, Inc., 401 Fuston Rd., Kansas City 15, Kans.  
Koch Sons Inc., George, P. O. Box 358, Evansville 4, Indiana  
KODAIR—Sperti Faraday Inc.  
Koehler Manufacturing Co., 395 Lincoln St., Marlborough, Massachusetts

Koenigman Co., R. A., 1408 Delmar Blvd., St. Louis 3, Missouri  
 Kohler Company, Kohler, Wisconsin  
 Kollid Kords, Inc., Box K, Hamden, Conn.  
 Kolton Electric Mfg. Co., 123 New Jersey Railroad Ave., Newark 5, New Jersey  
 Kondu Corp., 1040 W. 12 St., Erie, Pa.  
 Kondu Div., Erie Malleable Iron Co.—see Kondu Corp.  
 KONKRETE KCRE—Tilden Tool Mfg. Co.  
 CONTROL—Snider & Son, Inc., M. L.  
 KOPKALL—Gibson Refrigerator Co.  
 KOD-N-HEETAIRE—Markel Electric Products, Inc.  
 KOD-SEL—Pyramid Electric Co.  
 KOD-WAIV—International Engineering, Inc.  
 KOOLER-AIRE—United States Air Conditioning Corp.  
 KOOLMASTER—United Refrigerator Co.  
 Kopp Glass Inc., 2233 Palmer St., Swissvale, Pa.  
 Koppers Company, Inc., Koppers Bldg., Seventh & Grant Sts., Pittsburgh 19, Pennsylvania  
 Koppers Co., Inc., Metal Products Div., 200 Scott St., Baltimore 3, Md.  
 Koppers Co., Inc., Wood Preserving Div., Koppers Bldg., Pittsburgh 19, Pa.  
 Koral Electric Mfg. Co., 43-22 Van Dam St., Long Island City 1, New York  
 Kord Mfg. Co., Inc., 4510 White Plains Rd., New York 70, N. Y.  
 KODUCT—Johns-Manville  
 KORKER—U. S. Expansion Bolt Co.  
 KORKER KING—RCS Tool Sales Corp.  
 Korne Co., C. C., P. O. Box 483, Johnstown, Pennsylvania  
 Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif.  
 KOTE-LITE—Woodward Machine Co.  
 Kotron Rectifier Corp., 175 Murray St., Newark 5, N. J.  
 KOVAR—Stupakoff Ceramic & Mfg. Co.  
 Kresater & Co., Inc., 585 18th Ave., Newark 3, New Jersey  
 KRANE KAR—Silent Hoist & Crane Co.  
 Kraser Corp.—see Lektra Laboratories, Inc.  
 KRISP—Purpee Can Sealer Co.  
 KROMOVER—All-State Welding Alloys Co. Inc.  
 Krueger & Hudspeth, 5 East Third St., Cincinnati 2, Ohio  
 Krueze-Rieke, Auburn, Ind.  
 KUBEMASTER—United Refrigerator Co.  
 Kuhlman Electric Co., 1000 26th St., Bay City, Mich.  
 Kulka Electric Mfg. Co., Inc., 633 South Fulton Ave., Mount Vernon, New York  
 Kupfrian Mfg. Co., 395 State St., Binghamton, N. Y.  
 Kurman Electric Co., Inc., 35-18 37th St., Long Island City 1, New York  
 Kurzon, Inc., Morris, 1430 South Talman Ave., Chicago 8, Illinois  
 Kurz & Root Co., Inc., 232 E. North Island St., Appleton, Wis.  
 KUTALL—Spartan Saw Works, Inc.  
 KWIK—Dunton Co., M. W.  
 KWIK-CHANGE—Leviton Manufacturing Co. Inc.  
 KWIK-KALL—Lose Sound Engineers, J. M.  
 KWIK-LITE—Fulton Manufacturing Corp.  
 KWIKBAR—Krusz-Rieke  
 Kwitheat Mfg. Co., Div. of Sound Equipment Corp., 3732 San Fernando Rd., Glendale 4, Calif.  
 KWIX SETS—Thompson Clock Co., H. C.

L

L.B.—Long-Bell Lumber Co.  
 L-BLOW—Trade-Wind Motors, Inc.  
 L & H—Lindemann & Hoverson Co., A. J.  
 LK—General Air Conditioning Corp.  
 L-M—Line Material Co.  
 L. O. F. Glass Fibers Inc., 1810 Madison Ave., Toledo 1, Ohio  
 LPI—Lighting Products, Inc.  
 LS-FLOOD—Radiant Lamp Corp.  
 Labelon Tape Co., Inc., 450 Atlantic Ave., Rochester 9, N. Y.  
 LABMASTER—General Nuclear Corp.  
 LaBour Co., Inc., 1607 Sterling Ave., Elkhart, Ind.  
 LACKON—United States Radium Corp.  
 Laclede Steel Co., Arcade Bldg., St. Louis 1, Missouri  
 Ladbury Co., Inc., Boston Post Rd. (P. O. Box 88), Braintree, Conn.  
 LADY JORDAN—Jordan Refrigerator Co., Inc.  
 LADY PRICE—Burpee Can Sealer Co.  
 Laganke Electric Co.—see Lake Shore Electric Corp.  
 LAKE—National Time & Signal Corp.  
 Lake Shore Electric Inc.—see Lake Shore Electric Corp.  
 Lake Shore Electric Corp., 205 Willis St., Bedford, Ohio  
 Lake Shore Electric Mfg. Co.—see Lake Shore Electric Corp.  
 LAKIN—Thomas & Betts Co.  
 Lamb Electric Co., Lake St., Kent, Ohio  
 LAMICOID—Mica Insulator Co.  
 LAMINAC—American Cyanamid Co.  
 Laminated Plastics, Inc.—see Glasstic Corp.  
 Lamp Snatchers Co., 3013 N. Clark St., Chicago 14, Ill.  
 Lampco Lighting Fixture Corp.—see Hasco Electric Corp.  
 Lamplighter Products Co., Inc.—see Lightalams, Inc.  
 Lamson Corp., Lamson St., Syracuse, New York  
 Lancaster Lens Co., Lancaster, Ohio  
 LANCE MARKER—Keyes-Davis Co.  
 Landers, Frary & Clark, 47 Center St., New Britain, Connecticut  
 Langevin Mfg. Corp., Subsidiary of W. L. Maxson Corp., 37 W. 65 St., N. Y. 23, N. Y.  
 Lapp Insulator Co., Inc., 35 Gilbert St., Le Roy, New York  
 LARKIN—Central Transformer Corp.

LaRose & Associates, Inc., W. T., 31 Ontario St., Cohoes, New York  
 LARRA—Curtis Lighting, Inc.  
 Larson Instrument Co., 24 Orchard St., Tarrytown, N. Y.  
 LaSalle Products, Inc., 143 Seneca St., Buffalo 3, New York  
 LAST WORD—Starrett Company, L. S.  
 Lastik Products Co., Inc., 201 Iroquois Bldg., Pittsburgh 13, Pa.  
 Latham Time Recorder Co., 76 Third St., N. W., Atlanta 3, Ga.  
 LATROBE—Fullman Manufacturing Co.  
 Lau Blower Co., 2001 Home Ave., Dayton 7, Ohio  
 Laughlin Co., Thomas, 143 Fore St., Portland 6, Maine  
 LAUNDROMAT—Westinghouse Elec. Corp., Appliance Div.  
 Laurel Lamp Mfg. Co., Inc., Rome & Magazine Sts., Newark 5, N. J.  
 Lawrence Co., R. G., 41 Highwood Ave., Tenafly, N. J.  
 LAVA—Maryland Lava Co.  
 LAVA ROCK—Kirchberger & Co., Inc., M.  
 LAVOLAIN—Star Porcelain Co.  
 LAWCO—Velocity Power Tool Co.  
 Lawco Inc., 217 W. 2nd St., Hutchinson, Kans.  
 LAY-IN—Square D Co.  
 LAYTEX—United States Rubber Co.  
 LAZY BOY—Barton Products, Inc.  
 LE CARBONE—Carbone Corp.  
 LEADER—Remington Corp., Remington Air Conditioning Div.  
 Leader Electric Co.—see Cooler Aire  
 Leader Lamp Mfg. Co., 476 Broome St., N. Y. 13, N. Y.  
 LEADER-LINE—Benjamin Electric Mfg. Co.  
 Leeland Machine Tool Co., R. K., Cincinnati Electrical Tool Co. Div., Madison & Edwards Rd., Cincinnati 8, Ohio  
 LECTERN—Lose Sound Engineers, J. M.  
 LECTRIC-ICE—Uniflow Manufacturing Co.  
 ELECTRO-HOIST—Lindemann & Hoverson Co., A. J.  
 Electro Speed Company, 12005 North Burgard St., Portland 3, Oregon  
 ELECTRO-VAC—Lekie Electric Utensil Co., Inc.  
 Electrotron, Inc., 5560 Northwest Hwy., Chicago 30, Ill.  
 LEDALDY—Johnson Bronze Co.  
 LEDEX—Leland, Inc., G. H.  
 LEDITE—Minneapolis-Honeywell Regulator Co.  
 LEDLOK—U. S. Expansion Bolt Co.  
 Lee Co., K. O., Congress at First, Aberdeen, S. Dak.  
 Lee-Bert Inc., 900 Lapeer St., Saginaw, Mich.  
 Lee Electric, Inc., 132 Beckwith Ave., Paterson, N. J.  
 Lee Electric & Mfg. Co., 2806 Clearwater St., Los Angeles 39, Calif.  
 Leebaw Mfg. Co., 65 Wayne Ave., Youngstown 2, Ohio  
 LEESONA—Universal Winding Co.  
 Leetonia Tool Co., 142 Main St., Leetonia, Ohio  
 Leffel & Co., James, 426 East St., Springfield, Ohio  
 Leibfried Mfg. Corp., C. H., 95-101 Guernsey St., Brooklyn 22, N. Y.  
 Le John Mfg. Co., Inc., 111 Twenty-Second St., Hunt- ington, W. Va.  
 LEKOLITE—Century Lighting Inc.  
 Lektra Laboratories, Inc., 154-11th Ave., N. Y. 11, N. Y.  
 Leland, Inc., G. H., 123 Webster St., Dayton 2, Ohio  
 Leland Electric Co., Div. of American Machine & Foundry Co., 1501 Webster St., Dayton 1, Ohio  
 LEN-LOX—Lennox Furnace Co.  
 LENCOR—Wagner Mfg. Co., Inc.  
 Lenk Manufacturing Co., 30-48 Cummington St., Boston 15, Massachusetts  
 Lennox Furnace Co., 200 South 12 Ave., Marshalltown, Iowa  
 LENOX—Day-Brite Lighting, Inc.  
 LENSORD—Art Metal Co.  
 LENSILITES—Corning Glass Works  
 Lenz Co., Box 1044, Dayton 3, Ohio  
 Lenz Electric Mfg. Co., 1751 N. Western Ave., Chicago 47, Ill.  
 Leonard Precision Products Co., 9200 Bolsa Ave., Santa Ana, Calif.  
 LESTO—American Floor Surfacing Machine Co.  
 LETHERAY—Hanovia Chemical & Manufacturing Co.  
 LEV-O-LET—Leviton Manufacturing Co. Inc.  
 LEV-O-LOCK—Leviton Manufacturing Co. Inc.  
 LeValley Vitae Carbon Brush Co.—see Seager Standard Carbon Co.  
 LEVELATOR—Rotary Lift Co.  
 LEVELOCK—General Electric Co., Construction Materials Div.  
 LEVELRATOR—Fischer & Porter Co.  
 Leviton Manufacturing Co. Inc., 236 Greenpoint Ave., Brooklyn 22, New York  
 LEVOLIER—McGill Manufacturing Co. Inc.  
 Lew Electric Fittings Co., 627 W. Lake St., Chicago 6, Ill.  
 Lewthwaite Machine Co., Inc., T. H., 323 E. 47 St., New York 17, N. Y.  
 Lewis Products Co., M. J.—see Code Products Corp.  
 Lewis-Shepard Products, Inc., 125 Walnut St., Watertown 72, Massachusetts  
 Lewus Electric Co., 1254 W. Harrison St., Chicago 7, Ill.  
 Libbey-Owens-Ford Glass Co., Plaskon Div.—see Barrett Div., Allied Chemical & Dye Corp.  
 Libco Electric Products Co., Liberty St. & Worth, Central Falls, R. I.  
 LIBCOLET—Libco Electric Products Co.  
 LIBERTY—Johnson Belting Co. Inc.  
 Liberty Bell Mfg. Co., Inc., Short St., Minerva, Ohio  
 Librascope, Inc., 909 Western Ave., Glendale, Calif.  
 Lidsen, Inc., Gustave, 832 South Central Ave., Chicago 44, Illinois  
 LIFE GUARD—Dorsey Co., John E.  
 LIFE-LINE—Westinghouse Electric Corp.

LIFE LITE—Ultra-Violet Products, Inc.  
 LIFE-LUBE—Wood's Sons Co., T. B.  
 LIFE-SAVER—Cole Radio Works  
 LIFE SPAN—Page & Hill Inc.  
 LIFE-TIME—Billings & Spencer Co.  
 LIFE TIME—Slater Electric & Mfg. Co. Inc.  
 LIFE GUARD—Ross Operating Valve Co.  
 LIFETIME—American Warming & Ventilating Co.  
 LIFETIME-INDUSTRIALS—Lighting Products, Inc.  
 LIFT-A-DOR—Alliance Mfg. Co.  
 Lift Trucks, Inc., 2425 Spring Grove Ave., Cincinnati 14, Ohio  
 LIFTABOUT JR.—Shepard Niles Crain and Hoist Corp.  
 LIFTRUK—Silent Hoist & Crane Co.  
 LIGHT-IN-LINE—McC-Bridges Corp.  
 Light & Power Utilities Corp., 1035 Firestone Blvd., Memphis 7, Tennessee  
 LIGHT WARDEN—Electric Cord Co.  
 LIGHT WATCHMAN—Ripley Co., Inc.  
 Lightalams, Inc., 95 Atlantic Ave., Brooklyn 1, N. Y.  
 LIGHTER LITE—Cable Electric Products, Inc.  
 LIGHTGUARD—Exide Industrial Div., Electric Storage Battery Co.  
 Lighting Products, Inc., 1549 Park Ave. West, Highland Park, Ill.  
 Lightmore Appliance Corp., 59 Throop Ave., Brooklyn 6, N. Y.  
 LIGHTNIN—Mixing Equipment Co., Inc.  
 LIGHTNING—Vaco Products Co.  
 LIGHTNING LIFT—Atlas Overhead Door Co.  
 Lightoller, Inc., 346 Claremont Ave., Jersey City 5, New Jersey  
 LIGHTRON—Condi-Lite Corp.  
 Lighton of Cornwall, 195 Hudson St., Cornwall-on-Hudson, N. Y.  
 LIGHTSCAPER—Shelka Mfg. Co., Inc.  
 LIGHTWEIGHT CHAMP—Oster Mfg. Co.  
 Lima Electric Motor Co., Findlay Rd., Lima, Ohio  
 LIMITEMP—Westinghouse Electric Corp.  
 LIMITORQUE—Philadelphia Gear Works Inc.  
 LINABESTOS—Keesbey & Mattison Co.  
 LINAMETER—Penn Industrial Instrument Div., Burgess Manning Co.  
 LINCOLN—Forston Co.  
 LINCOLN—Sangamo Electric Company  
 Lincoln Electric Co., 22601 St. Clair Ave., Cleveland 17, Ohio  
 LINCOLNWELD—Lincoln Electric Co.  
 LINCWELDER—Lincoln Electric Co.  
 Lindberg Engineering Co., 2450 W. Hubbard St., Chicago 12, Ill.  
 Linde Air Products Co., Div. of Union Carbide and Carbon Corp., 30 E. 42 St., N. Y. 17, N. Y.  
 Lindell Electric Co., 115 E. 58 St., Minneapolis 23, Minn.  
 Lindell Electric Control Corp., 384 Canal St., New York 13, N. Y.  
 Lindemann & Hoverson Co., A. J., 601 W. Cleveland Ave., Milwaukee 15, Wis.  
 LINE-ARC—Electric Controller & Mfg. Co.  
 Line Electric Co., 131 Ogden St., Newark 4, N. J.  
 LINE GUARD—Preformed Line Products Co.  
 Line Material Co., Div. of McGraw Electric Co., 700 W. Michigan St., Milwaukee, Wis.  
 LINE-O-HEAT—Smith-Gates Corp.  
 LINE-O-LAMPS—Wiremold Company  
 LINE-O-POWER—Foote Bros. Gear & Machine Corp.  
 Linemaster Switch Corp., Woodstock, Connecticut  
 LINESTARTER—Westinghouse Electric Corp.  
 LINWELDER—Lincoln Electric Co.  
 LINIOMETER—Bourns Laboratories, Instrument Sales Corp.  
 Link-Belt Co., 307 N. Michigan Ave., Chicago 1, Ill.  
 LINOLITE—Frink Corp.  
 Lint, Clyde W., 2323 W. 18 St., Chicago 8, Ill.  
 Lintern Corp., Route 20 East, Painesville, Ohio  
 Lipe, Inc., W. C.—see Lipe-Rollway Corp.  
 Lipe-Rollway Corp., 806 Emerson Ave., Syracuse 4, N. Y.  
 LIQUAMATTE—American Wheelabrator & Equipment Corp.  
 LIQUI-BLENDER—Scovill Manufacturing Co., Hamilton Beach Co. Div.  
 LIQUIDIZER—Knapp-Monarch Co.  
 LITE BLOX—Guth Co., Edwin F.  
 LITE LINE—Benjamin Electric Mfg. Co.  
 LITE MITE—Stocker & Yale, Inc.  
 Lite-Mor Electric Mfg. Corp., 4607 Baum Blvd., Pittsburgh 13, Pa.  
 Litecontrol Corp., 36 Pleasant St., Watertown 72, Massachusetts  
 Litecraft Manufacturing Corp., 8 East 36th St., New York 16, New York  
 LITEKRAFT—Cole & Co., Inc., C. W.  
 LITEMASTER—Art Specialty Co.  
 LITEMASTER—Flexo International Corp.  
 LITEMASTER—Globe Lighting Products, Inc.  
 Lithonia Lighting Products Co., Box 206, Lithonia, Georgia  
 Littelfuse, Inc., 1865 Miner St., Des Plaines, Illinois  
 LITTLE AMERICAN—American Floor Surfacing Machine Co.  
 LITTLE BETSY—Karen Corp.  
 LITTLE DEVIL—Ohmrite Manufacturing Co.  
 LITTLE GIANT—Equipe Div., Aurora Equipment Co.  
 LITTLE GIANT—Cable Spinning Equipment Co.  
 LITTLE GIANT—Gelber Co., Samuel S.  
 LITTLE MAJOR—Arro Expansion Bolt Co.  
 LITTLE-SIX—Burgess Battery Company  
 LITTLE WIZARD—Round & Son Inc., David  
 LITTLE WONDER—Bartlett Manufacturing Co.  
 Littelford Bros., Inc., 453 East Pearl St., Cincinnati 2, Ohio  
 LIVE-SPIRAL—General Electric Co., Carboly Dept.  
 LIVELYAIRE—Westinghouse Electric Corp.  
 LLOYD—Johnson Manufacturing Co., Inc.  
 Lloyd Products Co., 225 Chapman St., Providence 5, Rhode Island

# COMPANY AND TRADE NAME DIRECTORY

LO-BRITE—Holophane Company, Inc.  
 LO-MED—American Engineering Co.  
 LO-HITE—Duff-Norton Co.  
 LO-LOAD—Aerol Products Co., Inc.  
 LO-LOSS—National Electric Products Corp.  
 LO-NOIZ-LEVEL—Allen Cooler & Ventilator, Inc.  
 LO-VOLT—Industrial Devices, Inc.  
 LO-X—BullDog Electric Products Co.  
 LOAD-GRAB—Hyster Co.  
 LOADGUARD—R T & E Co.  
 LOBAY—Holophane Company, Inc.  
 LOADSTAR—Leland Electric Co.  
 LOCALITIES—Fostoria Pressed Steel Corp.  
 LOCK-GYDE—Eckon Electric Co.  
 LOCK-TITE—Thomas & Betts Co.  
 Locke Dept., General Electric Co., P. O. Box 57, Baltimore 3, Md.  
 Lockley Machine Co., 310 Grove St., New Castle, Pennsylvania  
 LOCKLITE—Westinghouse Electric Corp., Lighting Div.  
 LOCKSWITCH—Minneapolis-Honeywell Regulator Co.  
 LOCKWELD—Fairbanks Co.  
 LOCOR—K. W. Battery Co., Inc.  
 LODSTAR—Mitchell Mfg. Co.  
 Loge Sound Engineers, J. M., 2171 W. Washington Blvd., Los Angeles 18, Calif.  
 LOGROCAP—Westinghouse Electric Corp.  
 LOG-ON—Hobbs Industries, Inc.  
 LOKATOR—Edwards Company, Inc.  
 LOKTITE—U. S. Expansion Bolt Co.  
 LOKUT—Shakeproof Div., Illinois Tool Works  
 Lombard Mfg. Co., 25 Oak Hills Ave., Youngstown 2, Ohio  
 Lonerang Mfg. Co., 704 Clark St., Albion, Mich.  
 Long-Bell Lumber Co., 910 R. A. Long Bldg., 926 Grand Ave., Kansas City 6, Missouri  
 Long, Mfr., Joe R., Derrick Light & Equipment Co. Div., 1201 E. Daggett (P. O. Box 414), Fort Worth, Tex.  
 LONGRIP—Ridge Tool Co.  
 LOOKOUT—Westcoast Div., General Time Corp.  
 LOOV-O-LITE—Guth Co., Edwin F.  
 LOPAS—Micamold Radio Corp.  
 Loral Electronics Corp., 794 E. 140 St., N. Y. 54, N. Y.  
 Lord Mfg. Co., 1635 W. 12 St., Erie, Pa.  
 Lord-Taber Co., Inc., 40 Ontario St., Canandaigua, New York  
 LORRAINE—Carbone Corp.  
 Louisville Ladder Co., 1101 W. Oak St., Louisville 10, Ky.  
 Louisville Metal Products—see Louisville Ladder Co.  
 Louverall Lighting Corp., 1770 West Berteau Ave., Chicago 13, Illinois  
 LOUVERAY—Duro-Test Corp.  
 LOUVERLINER—Duro-Test Corp.  
 Lovejoy Flexible Coupling Co., 4963 W. Lake St., Chicago 44, Ill.  
 Lowell Manufacturing Company, 1301 French St., Erie, Pennsylvania  
 LOVEX—Day-Brite Lighting, Inc.  
 LOVO—Campbell X-Ray Corp.  
 LOVOLT—Woodhead Co., Daniel  
 Lovyst & Co., Inc., C. M., 4000 West Marginal Way, Seattle 6, Washington  
 LOWATER—Inferno Co.  
 LOWBOY—Fogel Refrigerator Co.  
 Lowell Insulated Wire Div., Overlakes Corp., 171 Lincoln St., Lowell, Mass.  
 Lowell Insulated Wire Co.—see Lowell Insulated Wire Div., Overlakes Corp.  
 Lowell Wrench Co., 54 Commercial St., Worcester 8, Mass.  
 LOXARMOR—Okonite Co.  
 LOXIN—Star Expansion Bolt Co.  
 LOXON—McGill Mfg. Co., Inc.  
 LUARA—Curtis Lighting, Inc.  
 Lube Jack Co., 1415 14th St. (P. O. Box 1100), Santa Monica, Calif.  
 LUBRICREAM—Ohio Grease Co.  
 Lubriplate Div., Fiske Bros. Refining Co., 129 Lockwood St., Newark 5, N. J.  
 LUCETTE—Versen Company, Kurt  
 Lucifer Furnaces, Inc., Nesheim, Pa.  
 LUCO—Lukens Metal Co., Thomas F.  
 LUG-ALL—CraneVeyor Corp.  
 LUG-IT—Thomas & Betts Co.  
 Lukens Metal Co., Thomas F., Hedley & Bath Sts., Philadelphia 37, Pennsylvania  
 Lulis Company, Inc., 40-46 W. 20 St., New York 11, N. Y.  
 LUMA-CEILING—Pittsburgh Reflector Co.  
 Luma Electric Equipment Co., 1607 Coaling Drive (P. O. Box 132), Toledo, Ohio  
 LUMATROL—Micro Balancing Inc.  
 Lumenite Electronic Corp., 407 S. Dearborn St., Chicago 5, Ill.  
 LUMI-TONE—Pollak Luminescent Corp.  
 Lumidor Manufacturing Co., Inc., 4801 East 50th St., Los Angeles 56, California  
 LUMINETTE—Neo-Ray Products Inc.  
 Luminous Ceilings Inc., 2500 W. North Ave., Chicago 47, Ill.  
 Luminous Industries—see Canadian Radium & Uranium Corp.  
 LUMO—Anpleton Electric Co.  
 LUNAR—Versen Co., Kurt  
 LUNDY—Specialties, Inc.  
 LUSTERIZED—American Electric Cable Co.  
 LUSTERLAC—American Electric Cable Co.  
 LUSTREX—Monsanto Chemical Co., Plastics Div.  
 LUV-R-LOK—Lighting Products, Inc.  
 LUVEX—Day-Brite Lighting, Inc.  
 LUX-GRILL—House-O-Lite Corp.  
 Luxor Lighting Products, Inc., 350 5th Ave., New York 1, N. Y.  
 LUXOLITE—Westinghouse Electric Corp., Lighting Div.  
 LUTROL—Superior Electric Co.  
 LUXTRON—Bradley Laboratories, Inc.

Lynbrook Company—see Associated Stove Manufacturers  
 LYNN—Vaco Products Co.  
 Lyon Rural Electric Co., 2075 Moore St., San Diego 12, California  
 LYTECASTER—Lightoller  
 LYTSCAPE—Lightoller, Inc.  
 LYTRON—Monsanto Chemical Co., Plastics Div.

## M

M-SCOPE—Fisher Research Laboratory Inc.  
 MB Manufacturing Co., Inc., 1060 State St., New Haven 31, Connecticut  
 M.E.—Marathon Electric Mfg. Corp.  
 M & E Mfg. Co., 2571 Winthrop Ave., Indianapolis 5, Ind.  
 MGC—Motor Generator Corp., Hobart Brothers Affiliate  
 M-H Standard Co., Versabar Div.—see Versabar Corp.  
 M.I.C.—Molded Insulation Company  
 MIF—Malleable Iron Fittings Co.  
 M. L. Time Switch Div.—see McClintock Div., O. B., Diebold, Inc.  
 MPB—Miniature Precision Bearings, Inc.  
 M.P.C.—Milwaukee Parts Corp.  
 M-R-C—Marlin-Rockwell Corp.  
 MSA—Mine Safety Appliances Co.  
 M & T—Metal & Thermite Corp.  
 MTC—Flexonics Corp.  
 M & W Electric Mfg. Co., Inc., S. Walnut St. (P. O. Box 87), East Palestine, Ohio  
 MacArthur Products, Inc., 34 Front St., Indian Orchard, Massachusetts  
 Macbeth Daylighting Corp., P. O. Box 950, Newburgh, N. Y.  
 Macbeth Instrument Corp.—see Macbeth Daylighting Corp.  
 MacGillis & Gibbs Co., 1615 East Royal Pl., Milwaukee 2, Wisconsin  
 MACHETA—Aerovent Fan Co. Inc.  
 Machinery Electrification, Inc., Northboro, Mass.  
 Macwhite Company, 2910 14th Ave., Kenosha, Wis.  
 MADE RITE—Dominion Electric Corp.  
 Madison Electric Products, Inc., 119 Lake St., Madison, Ohio  
 MAGI-TROL—Westinghouse Electric Corp.  
 MAGIC—Basic Products Corp.  
 MAGIC ARM—Acme Lite Products Co.  
 MAGIC BOOKLITE—Eagle Electric Mfg. Co. Inc.  
 Magic Chef, Inc., 1641 S. Kingshighway, St. Louis 10, Mo.  
 MAGIC FRAME—Electro Siliv-A-King Corp.  
 MAGIC-GRIP—Allis-Chalmers Manufacturing Co.  
 MAGIC LITE—Guth Company, Edwin F.  
 MAGIC-POLE—Wallace Products Co., B. E.  
 MAGIC TIP—Hunter Sales Co. Inc., R. N.  
 MAGIC-TOUCH—Rodeale Mfg. Co., Inc.  
 MAGIC WAND—Sticht Co., Inc., Herman H.  
 MAGIDORES—Crowley Co. Inc., Henry L.  
 Magnusson Power Tool Co., 154 Distl Ave., Mansfield, Ohio  
 MAGNA—Ainsworth Lighting Inc.  
 MAGNA—Auto Arc-Weld Mfg. Co.  
 MAGNA FLO—Benjamin Electric Mfg. Co.  
 MAGNA-LITE—Metalcraft Products Co., Inc.  
 MAGNA-TORG—Hansen Mfg. Co., Inc.  
 MAGNADUR—Ferroxube Corp. of America  
 MAGNALAIRE—Westinghouse Electric Corp., Lighting Div.  
 MAGNALITE—Light & Power Utilities Corp.  
 MAGNALUX—Westinghouse Electric Corp., Lighting Div.  
 MAGNAPULSE—Gemco Electric Co.  
 Magnatran, Inc., 248 Schuyler Avenue, Kearny, New Jersey  
 MAGNATROL—Century Lighting Inc.  
 Magnatrol Valve Corp., 67 Fifth Ave., Hawthorne, New Jersey  
 Magnavox Co., Fort Way 4, Ind.  
 MAGNE-FILTER—Amer. Radiator & Stand. Sanitary Corp.  
 MAGNEBRAKE—Vickers Inc., Vickers Electric Div.  
 MAGNECLUTCH—Vickers Inc.  
 MAGNEFILE—Electronics Corp. of America  
 Magnethermic Corp., P. O. Box H, Youngstown 7, Ohio  
 Magnetic Amplifiers, Inc., 632 Tinton Ave., N. Y. 55, N. Y.  
 Magnetic Engineering & Mfg. Co., 850 Van Houten Ave., Clifton, N. J.  
 Magnetics, Inc., Box EPG, Butler, Pa.  
 MAGNETREATER—Radio Frequency Laboratories Inc.  
 Magnetrol, Inc., 2110 South Marshall Blvd., Chicago 23, Illinois  
 MAGNETTE—Heinemann Electric Co.  
 Maqui Flood Inc., 38 N. Second Ave., Mt. Vernon, N. Y.  
 MAGNIVOLT—INET, Inc.  
 MAGNOLIA—Industrial Lamp Corp.  
 MAGNORITE—Norton Company  
 Maguire Industries, Inc., Thordarson-Meisner Mfg. Div., Seventh & Belmont Sts., Mt. Carmel, Ill.  
 MAJESTIC—Dominion Electric Corp.  
 Majestic Mfg. Co., 455 Gustin Ave., St. Louis 16, Mo.  
 MAJOR—Gem Electric Mfg. Co., Inc.  
 Major Equipment Co., Inc., 4063 W. Fullerton Ave., Chicago 39, Ill.  
 Makepeace Co., D. E., Div. of Union Plate & Wire Co., Pine & Dunham Sts., Attleboro, Mass.  
 MAKI-POWER—Foots Bros. Gear & Machine Corp.  
 MAL-LEAD—Arro Expansion Bolt Co.  
 Malco Tool & Mfg. Co., 4025 West Lake St., Chicago 24, Illinois  
 Mail Tool Co., 7740 S. Chicago Ave., Chicago 19, Ill.  
 MALLDRILL—Mail Tool Co.  
 Malleable Iron Fittings Co., Branford, Connecticut  
 Malleable Iron Range Co., Beaver Dam, Wis.  
 Mallinckrodt Chemical Works, 2nd & Mallinckrodt Sts., St. Louis 7, Mo.

MALLSAW—Mail Tool Co.  
 MALTESE CROSS—Hewitt-Robins Inc.  
 MANCHEX—Exide Industrial Div., Electric Storage Battery Co.  
 Manco Mfg. Co., Bradley, Ill.  
 Manday Mfg. Co., Inc.—see Marlin Mfg. Co., Inc.  
 MANGANED—Arcos Corp.  
 MANGRID—Driver Co., Wilbur B.  
 MANITOWOC—Copper Boiler and Heater Works  
 Manitowoc Co., Inc., Manitowoc Equipment Works Div., 621 Quay St., Manitowoc, Wis.  
 Manning Co., R. A., 1810 North Ave., Sheboygan, Wis.  
 Manning Associates, R. A.—see Manning Co., R. A.  
 Manning, Maxwell & Moore, Inc., 250 E. Main St., Stratford, Conn.  
 Manning, Maxwell & Moore, Inc., Shaw-Bax Crane & Hoist Div., Muskegon, Mich.  
 MANSON—Okonite Co.  
 Marathon Electric Mfg. Corp., Wausau, Wisconsin  
 MARBELITE—Pacific Union Metal Co.  
 Marbellite Co., Inc., 27 Warren St., N. Y. 7, N. Y.  
 Marble Card Electric Co., 12th & Superior, Gladstone 1, Michigan  
 MARCO—Marvin Mfg. Co.  
 Marcus Transformer Co., Inc., Leesville Ave., Rahway, N. J.  
 MARFORGE—Market Forge Co.  
 MARINER'S PATHFINDER—Raytheon Mfg. Co.  
 Marine Electrical Instrument Co., 400 Canal St., Manchester, New Hampshire  
 Mark & Co., Clayton, 1900 Dempster St., Evanston, Illinois  
 MARK-N-COUNT—May Engineering Co.  
 MARKARRIER—Chisholm-Ryder Co., Inc., Premas Products Div.  
 Markel Electric Products, Inc., 145 Seneca St., Buffalo 3, N. Y.  
 Market Forge Co., 35 Garvey St., Everett 49, Mass.  
 Marks Manufacturing Co., 700 North Carpenter St., Chicago 22, Illinois  
 MARKSMAN—West Instrument Corp.  
 Marlin-Rockwell Corp., 402 Chandler St., Jamestown, N. Y.  
 Marlin Coil Co., 6135 Manchester Ave., St. Louis 10, Mo.  
 Marlow Lights, Inc., Fanwood, N. J.  
 Marlon Mfg. Co., Inc., 60-06 37th Ave., Woodside 77, L. I., N. Y.  
 Marquette Electric Switchboard Co., 311 N. Desplaines St., Chicago 6, Ill.  
 Marsh Corp., Jas. P., 3501 Howard St., Skokie, Ill.  
 Marsh Instrument Co.—see Marsh Corp., James P.  
 MARTHA WASHINGTON—Gray & Dudley Company  
 Martin Brothers Electric Co., 3620 Perkins Ave., Cleveland 14, Ohio  
 Martin Electric Co., 3040 East Outer Dr., Detroit 34, Michigan  
 Martin Fan & Blower Co., 4634 West 21st Place, Chicago 50, Illinois  
 Martin & Sons, H. P., 801 West 12 St., P. O. Box 475, Owensboro, Kentucky  
 Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio  
 MARVEL—Electric Blower Company  
 MARVEL—Pollak Corp., Joseph  
 MARVEL—United Electric Motor Co.  
 Marvel Fluorescent Mfg. Co.—see Marvel Lamp Co.  
 Marvel Lamp Company, 307 Newark St., Hoboken, N. J.  
 Marvel Rack Mfg. Co., Inc., 24 N. First St., Minneapolis 1, Minn.  
 Marvin Mfg. Co., 648 Santa Fe Ave., Los Angeles 21, Calif.  
 Maryland Bolt & Nut Co., Div. of American Chain & Cable Co., Inc., Box 5321, Mt. Washington Station, Baltimore 9, Md.  
 Maryland Lava Co., Box 205, Bel Air, Md.  
 Mason Silk, Inc., 25 E. 26 St., New York 10, N. Y.  
 MASS GEAR—Massachusetts Gear & Tool Co.  
 Massachusetts Gear & Tool Co., 28 Nashua St., Woburn, Mass.  
 Massey, Inc., A. H., 111 3rd St., P. O. Box 206, Derby, Conn.  
 Masson Co., Inc., M. Ross, 2160 Montcalm St., Indianapolis 2, Ind.  
 MASTER—Benjamin Electric Mfg. Co.  
 MASTER—Louisville Ladder Co.  
 Master Electric Company, 126 Davis Ave., Dayton 1, Ohio  
 MASTER GRANDE—Dorby Co.  
 MASTER-LIGHT—Carpenter Manufacturing Co.  
 MASTER-PRO—Cincinnati Time Recorder Co.  
 Master Rule Manufacturing Co., Inc., 40 Mulberry St., Middletown, New York  
 Master Vibrator Co., 1752 Stanley Ave. (P. O. Box 657), Dayton 1, Ohio  
 MASTERBEAM—Miro Flector Co., Inc.  
 Mastercraft Plastics Co., Inc., 95-01 150th St., Jamaica 35, N. Y.  
 MASTERWRENCH—Heller Bros. Co.  
 MASTERLINE—Blonder-Tongue Laboratories, Inc.  
 MASTERPHONE—Kellogg Switchboard & Supply Co.  
 MASTERTRON—Emmett Machine & Mfg. Inc.  
 MATCHLESS—Bridgeport Hardware Mfg. Corp.  
 MATCHLESS—Chisholm-Moore Hoist Div., Columbus McKinnon Chain Corp.  
 Matchless Electric Co., 1700 Washington Blvd., Chicago 12, Illinois  
 Mattatuck Mfg. Co., 1981 E. Main St., Waterbury 20, Conn.  
 Matthews & Co., James H., 3946 Forbes St., Pittsburgh 13, Pa.  
 Matthews Div., W. N.—see Chance Co., A. B.  
 Matthews Electric Heater Mfg. Co., Albertville, Ala.  
 Maury Manufacturing Corp., 2907-23 South Wabash Chicago 16, Illinois  
 MAX GRILL—Cummins Portable Tool Div., John Oster Mfg. Co.



# COMPANY AND TRADE NAME DIRECTORY

MAX-MIXER—Special Products Co.  
MAXAW—Cummins Portable Tool Div., John Oster Mfg. Co.  
MAXISAFE—Manning, Maxwell & Moore, Inc.  
MAXIVISION—Manning, Maxwell & Moore, Inc.  
Maxon Premix Burner Co., 20 E. 18th St. (P. O. Box 71), Muncie, Ind.  
Maxon Corp., W. L., Unimax Switch Div., 460 West 34 Street, New York 1, N. Y.  
Maxwell Equipment Co., Ford St., Milford, Conn.  
May Engineering Co., 6055 Lankershim Blvd., North Hollywood, Calif.  
MAYECO—May Engineering Co.  
MAYFAIR—Amer. Radiator & Standard Sanitary Corp.  
Mayhew, H. H.—see Mayhew Steel Products, Inc.  
Mayhew Steel Products Inc., Sears St. Extension, Shelburne Falls, Massachusetts  
Mayland's Son, R. H., 54 Willoughby, Brooklyn 1, N. Y.  
Mayer Corp., 1961 W. 112 St., Cleveland 2, Ohio  
MAZZELLA—Wire Rope Corp. of America, Inc.  
McBain Corp.—see Tork-Master Div., Harvill Corp.  
McCabe-Powers Auto Body Co., 5900 North Broadway, St. Louis 15, Missouri  
McCARTHY—Salem Tool Co.  
McCarthy Electric Co., 2112-16 E. Woodbridge St., Detroit 7, Mich.  
McClintock Div., O. B., Diebold, Inc., Canton 2, Ohio  
McColpin-Christie Corp., 3410 West 67th St., Los Angeles 43, Calif.  
McCorkle Co., D. H., Box 97, Station A, Berkeley, Calif.  
McDONALD—Sierra Electric & Manufacturing Co.  
McDonald Mfg. Co.—see Sierra Electric Corp.  
McDonald Mfg. Co., A. Y., 12th & Pine Sts., Dubuque, Iowa  
McDonnell & Miller Inc., 3500 N. Spaulding Ave., Chicago 18, Ill.  
McFadden & Co., Inc., H. G.—see Emeraldite Co., Inc.  
McFarland Co., L. D., McFarland Bldg., Sand Point, Idaho  
McGill Manufacturing Co., Inc., Valparaiso, Indiana  
McGraw Electric Co., Bersted Mfg. Co. Div., Fostoria, Ohio  
McGraw Electric Co., Bussman Mfg. Co. Div., 2536 W. University St., St. Louis 7, Mo.  
McGraw Electric Co., Clark Division, 5201 West 65th St., Chicago 38, Illinois  
McGraw Electric Co., Line Material Co. Div., 700 W. Michigan St., Milwaukee, Wis.  
McKay Co.—see McKay Chemical Co. Inc.  
McKay Chemical Co. Inc., 880 Pacific St., Brooklyn 38, New York  
McKee Div., Thatcher Glass Mfg. Co., Inc., Grand Central Ave., Elmhurst, N. Y.  
McKee-Eclipse—see Eclipse Fuel Engineering Co.  
McKinley Co., Ben P., 626 W. Jackson Blvd., Chicago 6, Ill.  
McKinley-Mockenhaupt Co.—see McKinley Co., Ben P.  
McLAREN—Brush Aboe, Inc.  
McLarty Systems, 2600 Dickman Rd., Battle Creek, Mich.  
McLean Engineering, Box 228, Princeton, N. J.  
McLean Engineering Laboratories—see McLean Engineering  
McMillan Mfg. Co., 310 Broadway, St. Paul 1, Minn.  
McPhibben Mfg. Co., Inc., 1329 Willoughby Ave., Brooklyn 37, N. Y.  
MECHANIC—CUT—Peerless Machine Co.  
Mechanical Industries Production Co., 217-223 Ash St., Akron 8, Ohio  
Mechanical Products, Inc., 1824 River St., Jackson, Michigan  
MECHANOPHASE—Electro-Voice Inc.  
MECHO-STROBE-LITE—Guider, Roll and Service Co.  
Meco Metal Box & Panel Mfg. Co., Inc., 2522 W. Huntingdon St., Philadelphia 32, Pa.  
MEGAVAC—Central Scientific Co.  
MEGGER—Biddle Co., James G.  
MEGGER—Sticht Co., Inc., Herman H.  
Meier Electric & Machine Co., Inc., 3525 East Washington St., Indianapolis 7, Indiana  
Meierjohan-Wengler, 1102 West Ninth St., Cincinnati 3, Ohio  
Meletron Corp., 950 North Highland Ave., Los Angeles 38, California  
MELLAPHONE—Magnetic Engineering & Mfg. Co.  
MELMAC—American Cyanamid Co.  
MELOCALL—Edwards Company, Inc.  
Melody Master Mfg. Co., 2842 N. Cicero Ave., Chicago 41, Ill.  
MEMCO—Magnetic Engineering & Mfg. Co.  
Memco Engineering & Mfg. Co., Inc., Commack, L. I., N. Y.  
Mend-It Sleeve Mfg. Co., 136 Bonita Ave., Piedmont 11, Calif.  
Mephisto Tool Co. Inc., Box 16, Hudson, New York  
MERCOR—Corona Equipment Co., Inc.  
MERCOR LITE—Great Northern Mfg. Corp.  
Merco Corp., 4201 W. Belmont Ave., Chicago 41, Ill.  
MERCURY—Electro-Voice Inc.  
MERCURY—Vulcan Electric Co.  
Mercury Clutch Div., Automatic Steel Products, Inc., 1201 Camden Ave., S. W., Canton 6, Ohio  
Mercury Mfg. Co., 4044 South Halsted St., Chicago 9, Ill.  
MERCURYSTAT—Westinghouse Electric Corp.  
MERION—Wamp Company, John  
MERIT—Elo Shutter & Mfg. Co.  
MERIT—Emmett Machine & Mfg. Inc.  
MERITROL—Emmett Machine & Mfg. Inc.  
Merkle-Korff Gear Co., 213 North Morgan St., Chicago 7, Illinois  
Merrill Engineering Laboratories, 1240 Lincoln, Denver 3, Colo.  
Merwin Manufacturing Corp., 19th & German Sts., Erie, Pennsylvania  
Mesa Metal Works, P. O. Box 294, Chatham, N. J.

MET-L-FLEX—Robinson Aviation, Inc.  
METAL ZIPPER—Mid-States Welder Mfg. Co.  
Metalcraft Products Co., Inc., Mascher & Lippincott Sts., Philadelphia 33, Pennsylvania  
Metalcrafts, Inc., 677 Broadway, N. Y. 12, N. Y.  
Metals & Controls Corp., General Plate Div., 34 Forest St., Attleboro, Mass.  
METAMETER—Bristol Company  
METAPHONE—Bristol Co.  
METAPHRAM—Honeywell-Honeywell Regulator Co.  
METAVANE—Bristol Co.  
Metco Lighting—see Metalcraft Products Co., Inc.  
METEOR—Chisholm-Moore Hoist Corp.  
METEOR—Metalcraft Products Co., Inc.  
Meteor Electric Co., Inc.—see Leviton Mfg. Co., Inc.  
Meteor Manufacturing Corp., 1441 Main St., Buffalo 9, New York  
Meter Devices Co., 1001 Prospect Ave., S.W., Canton 6, Ohio  
METER-MATIC—International Register Co.  
Meters, Inc., 5353 20th Keystone Ave., Indianapolis 20, Indiana  
METL-CAN—Pyramid Electric Co.  
METRON—Waveland Electric Co.  
Metron Instrument Co., 432 Lincoln St., Denver 3, Colo.  
Metropolitan Device Corp.—see Murray Mfg. Corp.  
MEYCO—Meyers Co., W. F.  
Meyers Co., W. F., 1017 Fourteenth St., Bedford, Ind.  
Meynell Manufacturing Co., 3918 West 20th St., P. O. Box 1805, Erie, Pennsylvania  
MIAMI CAREY—Carey Mfg. Co., Philip  
Mica Insulator Co., Box 1076, Schenectady 1, N. Y.  
MICA-GLAS—National Electric Coil Co.  
MICABOND—Continental-Diamond Fibre Co.  
Micacraft Products, Inc., 703 McCarter Highway, Newark 5, New Jersey  
Micamold Radio Corp., 1087 Flushing Ave., Brooklyn 37, New York  
MICANITE—Mica Insulator Co.  
MICAPS—Micamold Radio Corp.  
MICARTA—Westinghouse Electric Corp.  
Michigan Oven Co., 415 Brainerd, Detroit 1, Mich.  
Michigan Tool Co., Cone-Drive Gears Div., 7171 East McNichols Rd., Detroit 12, Michigan  
MICO—Mica Insulator Co.  
MICRELAY—Ebert Electronics Corp.  
MICRO—New Hampshire Ball Bearings, Inc.  
Micro Div., Minneapolis-Honeywell Regulator Co.—see Micro Switch  
Micro Balancing Inc., Garden City Park, L. I., N. Y.  
MICRO-FIBRES—L.O.F. Glass Fibers, Inc.  
MICRO-LARM—Connecticut Telephone & Electric Corp.  
MICRO-LATCH—Minneapolis-Honeywell Regulator Co.  
MICRO LITE—Burton Mfg. Co.  
MICRO-MIX—Lennox Furnace Co.  
MICRO-NAMIC—Micro Balancing, Inc.  
MICRO-STEP—Doall Co.  
Micro Switch, Div. of Minneapolis-Honeywell Regulator Co., Chicago & Springfield, Freeport, Ill.  
MICRO-TRIP—Minneapolis-Honeywell Regulator Co.  
MICROACT—Bristol Co.  
MICROFLASH—General Radio Company  
MICROLITE—L.O.F. Glass Fibers, Inc.  
MICROLOY—Capewell Mfg. Co.  
MICROLYTIC—Micamold Radio Corp.  
MICROMOTOR—Redmond Company, Inc.  
MICROPOSITIONER—Barber-Colman Co.  
MICROSEEN—Manning, Maxwell & Moore, Inc.  
MICROSHIM—American Silver Co., Inc., Industrial Div.  
MICROSTEEL—Simpson Electric Co.  
MICROTHERM—Barber-Colman Co.  
MID-CENTURY—Mitchell Mfg. Co.  
MID-RIP—General Cable Corp.  
Mid-States Welder Mfg. Co., 6025 South Ashland Ave., Chicago 36, Illinois  
Mid-West Chandler Co., 15th & Gentry (P. O. Box 7598), North Kansas City 16, Mo.  
MIDAS—Plastic Illuminating Co., Inc.  
Midco Mfg. & Distributing Co., Inc., 1129 S. 13 St., Sheboygan, Wis.  
Midget Heater & Specialty Co., 2801 Pacific Ave., Tacoma 4, Wash.  
MIDGET-LITE—Swiweller Co., Inc.  
MIDGETESTER—Simpson Electric Co.  
MIDGETSCOPE—Radio City Products Co., Inc.  
Midland Paint & Varnish Co., 3801 E. 91st St., Cleveland 5, Ohio  
Midwest Electric Mfg. Co., 1639 Walnut St., Chicago 12, Illinois  
Midwest Electric Products, Inc., 1515 North Front, Mankato, Minnesota  
Midwest Lighting Products Co., P. O. Box 536, Edgewater Branch, Cleveland 7, Ohio  
Midwest Rubber Co., 14275 E. Nine Mile Rd., East Detroit, Mich.  
Miehle Printing Press & Mfg. Co., Star-Kimble Motor Div., 200-C Bloomfield Ave., Bloomfield, N. J.  
MIGHTY MIDGET—Coffing Hoist Div., Duff-Norton Co.  
MIGHTY MIDGET—Honeycutt Mfg. Co., Inc.  
MIGHTY MIDGET—Stanley Electric Tools  
MIGHTY MIKE—Mechanical Industries Production Co.  
MIJAKON—Fast & Co., John E.  
MIKASUB—Fast & Co., John E.  
MIL-CARB—Wrought Washer Mfg. Co.  
MIL-R-PLAS—Miller Products Co., Inc.  
MIL-R-PRENE—Miller Products Co., Inc.  
MIL-WROT—Wrought Washer Mfg. Co.  
Miles Co., Franklin S., 2427 North Mascher St., Philadelphia 33, Pennsylvania  
Miles Reproducer Co., Inc., 812 Broadway, New York 9, N. Y.  
MILFORD—Thompson & Son Co., Henry G.  
MILLBOARD—Carey Mfg. Co., Philip  
MILLER—General Machine & Welding Works, Inc.  
Miller Company, 99 Center St., Meriden, Connecticut  
Miller Electric Co., 120 Main St., Pawtucket, R. I.  
Miller Electric Mfg. Co., 718 S. Bounds St., Appleton, Wis.

Miller Equipment Co., Inc., 13th & New Sts., Frank-  
lin, Pennsylvania  
Miller Harris Instrument Co., 601 E. Ogden Ave.,  
Milwaukee 2, Wis.  
Miller Manufacturing Co., 9425 Seymour Ave., Schiller  
Park, Illinois  
Miller Mill Co., Inc., T. R., Brewton, Ala.  
Miller Products Co., Inc., 29 Warren St., N. Y. 7,  
N. Y.  
Miller Sons, R. F., Harvard, Neb.  
Millerbernd Manufacturing Co., P. O. Box 130,  
Winnetka, Minnesota  
Millers Falls Co., 57 Wells St., Greenfield, Massa-  
chusetts  
MILLER'S POLES—Miller Mill Co., Inc., T. R.  
MILLITE—Westinghouse Electric Corp., Lighting Di-  
vision  
MILWAUKEE—Northern Light Company  
Milwaukee Electric Tool Corp., 5352 West State St.,  
Milwaukee 8, Wisconsin  
Milwaukee Lamp Mfg. Co.—see Rex Electric Mfg.  
Corp.  
Milwaukee Parts Corp., 607-15 S. Sixth St., Milwau-  
kee 4, Wis.  
Milwaukee Resistor Co., 700 West Virginia St., Mil-  
waukee 4, Wisconsin  
MILWAUKEE WROT—Wrought Washer Mfg. Co.  
Mimar Products, Inc., 138 Spencer St., Brooklyn 5,  
New York  
MIMARVEL—Mimar Products, Inc.  
Mimms Company, E. N., 908 Mason St., Louisville 4,  
Kentucky  
MINALITE—Westinghouse Electric Corp., Lamp Div.  
MINALITH—Koppers Co., Inc., Wood Preserving Div.  
Mine Safety Appliances Co., 201 N. Braddock Ave.,  
Pittsburgh 8, Pa.  
MINERALITE—Ultra-Violet Products, Inc.  
Minerallite Electric Co., 25 North Peoria St., Chicago  
7, Illinois  
Mines Equipment Co.—see Joy Mfg. Co.  
MINI-BOOM—Smith-Vector Corp.  
MINI-BREAKERS—Mechanical Products, Inc.  
MINI-COUPLER—Jaxev  
MINI-GATOR—Mueller Electric Co.  
MINI-PLATE—Jaxev  
MINI-SOCKET—Jaxev  
MINI-VOLT—Industrial Devices, Inc.  
Mixture Precision Bearings, Inc., 101 Carpenter St.,  
Keene, New Hampshire  
MINISEL—Electronic Devices, Inc.  
MINITROL—Westinghouse Electric Corp.  
Minneapolis Electric & Construction Co., 80 South  
12th St., Minneapolis 3, Minnesota  
Minneapolis-Honeywell Regulator Co., 2753 Fourth  
Ave., S., Minneapolis 8, Minnesota  
Minneapolis-Honeywell Regulator Co., Industrial Div.,  
Wayne & Windrim Aves., Phila. 44, Pa.  
Minneapolis-Honeywell Regulator Co., Micro Switch  
Div., Chicago & Springfield, Freeport, Ill.  
Minnesota Mining & Manufacturing Co., 900 Fauquier  
Ave., St. Paul 6, Minnesota  
Minnesota Mining & Mfg. Co., Adhesives and Coat-  
ings Div., 411 W. 4th St., Detroit 2, Mich.  
Minnesota Mining & Mfg. Co., Irvington Varnish &  
Insulator Div., 6 Argyle Terrace, Irvington 11, N. J.  
Minnesota & Ontario Paper Co., National Pole &  
Treating Div., 500 Investors Bldg., Minneapolis 2,  
Minn.  
Minnetonka Mfg. Co.—see Tel-E-Lect Products, Inc.  
Minor Rubber Co., Inc., 51 Ackerman St., Bloomfield,  
N. J.  
MINUTE MAN—Pyrene Manufacturing Co.  
MINUTE-METER—Lux Clock Manufacturing Co., Inc.  
MINUTE-MINDER—Lux Clock Manufacturing Co., Inc.  
MINUTE MOUNT—Progress Mfg. Co., Inc.  
MINUTEMAN—Electric Cord Co.  
MIRAC—Mitchell-Rand Insulation Co.  
MIRAC-O-LITE—Cutler Light Mfg. Co.  
MIRACLE—Okun Co., A. L.  
MIRACLE—Snyder & Son, Inc., M. L.  
Miracle Mfg. Co.—see Miracle Paint Rejuvenator Co.  
Miracle Paint Rejuvenator Co., 500 North Robert St.,  
St. Paul 1, Minnesota  
MIRAFLEX—Mitchell-Rand Insulation Co.  
MIRAGLAS—Mitchell-Rand Insulation Co.  
MIRALITE—Mitchell-Rand Insulation Co.  
MIRO-HAT—MiroFlector Co., Inc.  
MiroFlector Co., Inc., 148 19th St., Brooklyn 32,  
N. Y.  
MIROLITE—MiroFlector Co., Inc.  
MIRRLIES—Brush Aboe, Inc.  
Mirro Co.—see Aluminum Goods Mfg. Co.  
MIRROSCOPE—Simpson Electric Co.  
Misser Mfg. Co., Inc., 202-208 Walton St., Syra-  
cuse, N. Y.  
Miskella Infra-Red Co., East 73rd & Grand Ave.,  
Cleveland 4, Ohio  
MISSING LINK—Laughlin Co., Thomas  
MISSING LINK—Mid-States Welder Manufacturing  
Company  
MISSISSIPPI DELUGE—McDonald Mfg. Co., A. Y.  
MISSISSIPPI MASTER—McDonald Mfg. Co., A. Y.  
Mitchell Industries, Inc., Box 17, Municipal Airport,  
Mineral Wells, Tex.  
Mitchell Manufacturing Co., 2525 North Clybourn Ave.,  
Chicago 14, Illinois  
Mitchell Moulding Co., 1501 Circle Ave., Forest Park,  
Illinois  
Mitchell-Rand Insulation Co., 51 Murray St., New  
York 7, N. Y.  
MITCO—Mitchell Moulding Co.  
MITT-MITT—Utility Service Co., Inc.  
MIX N' WHIP—Howard Industries, Inc.  
MIXCO—Mixing Equipment Co., Inc.  
MIXEND—Arcos Corp.  
MIXETTE—Scovill Manufacturing Co., Hamilton Beach  
Co. Div.  
Mixing Equipment Co., Inc., 135 Mt. Read Blvd.,  
Rochester 11, New York



# COMPANY AND TRADE NAME DIRECTORY

MO-PERMALOY—Arnold Engineering Co.  
MOBILE—Westinghouse Electric Corp.  
Mobile Aerial Towers, Inc., 1405 N. Clinton St., Fort Wayne, Ind.  
MOBILEX—Day-Brite Lighting, Inc.  
MOCO—Michigan Oven Co.  
Model Electric Products Co., 1500 Bangs Ave., Asbury Park, N. J.  
MODERN—Sierran & Rellly, Inc.  
MODERN-FLOW—Equipto Div., Aurora Equipment Co. Modern Industrial Products Co., 1165 Broadway, N. Y. 1, N. Y.  
Modern Light Co., Inc., 7809 Maplewood Industrial Court, St. Louis 17, Mo.  
Modern Sewing Machine Co., 302-304 Saratoga Ave., Brooklyn 33, N. Y.  
Modern Swimming Pool Co., Inc., 1 Holland Ave., White Plains, N. Y.  
MODERNAIRE—National Gas Equipment Co., Inc.  
MODERNPHONE—Radio Corp. of America, Engineering Products Div.  
MODU-AIRE—United States Air Conditioning Corp.  
MODU-WAVE—Sikaky Bros., Inc.  
MODULFLOW—Minneapolis-Honeywell Regulator Co.  
MODULE—Mitchell Manufacturing Co.  
MODULITE—Electronic Control Corp.  
MODULITE—Major Equipment Co.  
MODUSNAP—Minneapolis-Honeywell Regulator Co.  
MODUTROL—Minneapolis-Honeywell Regulator Co.  
MODUTRON—Minneapolis-Honeywell Regulator Co.  
Moe Light Div., Thomas Industries, Inc., 700 Oak St., Ft. Atkinson, Wis.  
MOEDAPTES—Moe Light, Inc.  
MOHAWK—Collins Co., Collinsville, Conn.  
MOHAWK—Scharff, Inc., J. H.  
MOHAWK—Surette Storage Battery Co., Inc.  
MOIST-O-GRAPH—Minneapolis-Honeywell Regulator Co.  
MOISTEMP—Rochester Products Corp.  
MOISTURE MAGNET—Remington Corp., Remington Air Conditioning Div.  
Molded Insulation Co., 335 E. Price St., Phila. 44, Pa.  
MOLDOCHILL—Capewell Mfg. Co.  
Mole-Richardson Company, 937 North Symca Ave., Hollywood 38, California  
Moline Accessories Corp.—see Montgomery Elevator Co.  
Moline Elevator Co.—see Montgomery Elevator Co.  
Moloney Electric Co., 5390 Birchler Blvd., St. Louis 20, Missouri  
MONAR—Arcos Corp.  
MONARCH—Curtis Lighting, Inc.  
MONARCH—DeWalt, Inc.  
MONARCH—Hewitt-Robins, Inc.  
MONARCH—Malleable Iron Range Co.  
Monarch Elevator & Machine Co., 435 Morehead Ave., Greensboro, North Carolina  
Monarch Fuse Co., Ltd., 118 East First St., James-town, New York  
Monarch Lighting Fixture Corp.—see Ender-Monarch Corp.  
MONARCH WHYTE—Macwhyle Company  
MONELITE—Dockson Corp.  
MONEND—Arcos Corp.  
Monerson's Electrical Machine Works, Inc., 220 E. Nineteenth St. (P. O. Box 1698), Bakersfield, Calif.  
MONITOR—General Time Corp., Westclox Div.  
MONO-BOLT—Chance Co., A. B.  
MONO-LAG—Monarch Fuse Co., Ltd.  
MONOBALL—Southwest Products Co.  
MONOGRAM—Quincy Stove Mfg. Co.  
MONOGRAM—Refrigerating Specialties Co.  
MONOLARM—Russell & Stoll Company, Inc.  
MONOLOCK—General Electric Co.  
MONOMOTOR—Redmond Co., Inc.  
MONOPHONE—Automatic Electric Co.  
MONOPLEX—Shure Brothers, Inc.  
MONOSET—Telex, Inc.  
MONOTUBE—Tuttle & Kift, Inc.  
MONOWAY—Union Metal Manufacturing Co.  
MONOWAT—General Electric Co., Construction Materials, Div.  
MONOWELD—All-State Welding Alloys Co., Inc.  
Monsanto Chemical Co., Plastics Div., Springfield 2, Mass.  
MONSON SLATE—Portland-Monson Slate Co.  
Montgomery & Co., Inc.—see Montgomery Tool Co.  
Montgomery Elevator Co., 30-20th St., Moline, Illinois  
Montgomery Tool Co., 7 Tichenor Lane, Newark 5, N. J.  
Moon Mfg. Co., 108 N. Jefferson St., Chicago 6, Ill.  
MOORE—Chisholm-Moore Hoist Div., Columbus McKinnon Chain Corp.  
Moore Co., P. O. Box 194, St. Louis 5, Mo.  
Moore and Co., Samuel, Dekoron Tubing Div., Main & Orchard Sts., Mantua, Ohio  
MOR-AIRE—Maurey Mfg. Corp.  
Mor-Flo Heater Corp., 2176 East 76th St., Cleveland 3, Ohio  
MOR-GRIP—Maurey Mfg. Corp.  
MORFLEX—Rambusch Decorating Co.  
MORFLEX—Morse Chain Company  
Morrison Stove Products, Inc., 601 Amherst St., Buffalo 7, New York  
Morrow Co., 400 West Madison St., Chicago 6, Illinois  
Morse Chain Co., Borg Warner Corp., Ithaca, N. Y.  
Morse Company, Frank W., 1300 Soldiers Field Rd., Boston 35, Massachusetts  
Moss Atlas Corp.—see Circle Air Products, Inc.  
MOT-O-TROL—Westinghouse Electric Corp.  
MOTO MITE—Globe Industries, Inc.  
Moto Products Manufacturing Co.—see American Generator & Armature Co.  
Moto-Truc Co., 1953 East 59, Cleveland 3, Ohio  
MOTODRIVE—Reeves Pulley Co., Inc.  
MOTOPRENE—Paranite Wire & Cable Div., Essex Wire Corp.  
MOTOR—Elgo Shutter & Mfg. Co.  
Motor Generator Corp., Hobart Brothers Affiliate, Hobart Square, Troy 1, Ohio  
Motor Products Corp., Deepfreeze Appliance Div., 2301 Davis St., North Chicago, Ill.

MOTOR SENTINEL—Bryant Electric Co.  
MOTOR SENTINEL—Westinghouse Electric Corp.  
Motor Specialty, Inc., 1331 18 St., Racine, Wis.  
MOTOR WATCHMAN—Westinghouse Electric Corp.  
Motor-X Products Co.—see Graham Co., Inc., Phillip E.  
MOTORDOR—Broan Manufacturing Co., Inc.  
MOTOREDUCTERS—Falk Corp.  
MOTORELAY—Automatic Control Co.  
Motoresearch Company, 1600 Junction Ave., Racine, Wisconsin  
MOTORLITE—Ward Leonard Electric Co.  
Motorola Communications & Electronics, Inc., 4501 Augusta Blvd., Chicago 51, Ill.  
MOTORLYTICS—Micamold Radio Corp.  
MOTORMATIC—Allis-Chalmers Mfg. Co.  
MOTORSTAIRS—Peele Co.  
MOTOTROL—Automatic Control Co.  
MOVAL—Mivouri Belting Co.  
MNYNO—Dobbins & Myers, Inc.  
MR. and MRS.—Parker Co., Charles  
MU—Acro-Mu Switch Div., Acro Mfg. Co.  
Mucon Corp., 9 St. Francis St., Newark 5, New Jersey  
Mueller Climatrol, 2005 W. Oklahoma Ave., Milwaukee 15, Wis.  
Mueller Electric Co., 1583 East 31 St., Cleveland 14, Ohio  
MUL-TV—Jervold Electronics Corp.  
Mullenbach Div., Electric Machinery Mfg. Co., 2300 E. 27 St., Los Angeles 58, Calif.  
Mullenbach Electric Mfg. Co.—see Mullenbach Div., Electric Machinery Mfg. Co.  
MUL-A-Frame Div., Alinworth Mfg. Corp., 1471-77 E. Ainsworth St., Detroit 7, Mich.  
MULTALARM—Automatic Control Co.  
Multi-Amp Corp., 10 Third St., Newark 7, N. J.  
MULTI-ROND—United States Gasket Co., Fluorocarbon Products Div.  
MULTI-BREAKER—Square D Co.  
MULTI-CASING—Gelber Co., Samuel S.  
Multi-Clean Products, Inc., 2277 Ford Parkway, St. Paul 1, Minnesota  
Multi Electric Mfg., Inc., 4223-43 West Lake St., Chicago 24, Illinois  
MULTI-GATE—Hammarlund Mfg. Co., Inc.  
Multi-Matic Corp., 14741 Bessemer St., Van Nuys, Calif.  
MULTI-MOUNT—Blackburn Corp., Jasoer  
MULTI-MOUNT—Sterling Electric Motors, Inc.  
Multi-Products Mfg. Co.—see Duro Fittings Co.  
MULTI-SCAL—Sireno Co., Inc.  
MULTI USE—McLarty Systems  
MULTI-V—Maurey Mfg. Corp.  
MULTI-VENT—Pyle-National Co.  
MULTIFLEX—Soer Carbon Co.  
MULTILUX—Westinghouse Electric Corp., Lighting Div.  
MULTI-F UNIT—New Intv Electric Co.  
MULTITROL—Grinnell Company, Inc.  
MULTISCOP—Peele Co.  
MULTISCAPIC—Kulka Electric Mfg. Co., Inc.  
MULTITAP—Chance Co., A. B.  
MULTITESTER—Radio City Products Co., Inc.  
MULTITROL—Grinnell company, Inc.  
MULTITRON—Ward Leonard Electric Co.  
MULTIVARE—Westinghouse Electric Corp.  
MULTIVIGY—Ohrmiller Manufacturing Co.  
MUMTUMITE—T-E Circuit Breaker Co.  
Mund Bolters, Inc., 1600 North Indiana St., Los Angeles 63, California  
MURRO—Murray Mfg. Co., D. J.  
MUREX—Metal & Thermit Corp.  
Murphy Elevator Company, Inc., 128 East Main St., Louisville 2, Kentucky  
Murray Company, Inc., D. A., 632 North Mill St., Tipton, Indiana  
Murray Company of Texas, Inc., P. O. Box 1517, Atlanta, Georgia  
Murray Mfg. Co., D. J., 1002-24 Third St., Wausau, Wis.  
Murray Manufacturing Corp., 1250 Atlantic Ave., Brooklyn 16, New York  
MUSTANG—Continental Battery Mfg. Corp.  
MULTI-VENT 17—Stewart Industries, Inc.  
Murtal Foundry and Machine Co.—see Potter & Rayfield, Inc.  
Mycalex Corp. of America, 125 Clifton Blvd., Clifton, New Jersey  
MYKROY—Electronic Mechanics, Inc.

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NE—National Electric Products Corp.  
N. E. BEND—Burbank Electrical Products  
N. J.—New Jersey Porcelain Co.  
NTC—Keystone Carbon Co.  
NVC—National Video Corp.  
NWL—Notthofer Winding Labs.  
NYF—New York Fluorescent Mfg. Co.  
NA-ALD—Alden Products Co.  
NADALITE—Gibson Mfg. Co.  
NAIL IT—Thiel Tool & Engineering Co.  
NALCO—National Lead Company  
NALCO—North American Electric Lamp Co.  
NALCOBRITE—North American Electric Lamp Co.  
NAMCO—National Acme Company  
Nankervis Co., Geo. L., 19255 W. Davidson Ave., Detroit 23, Mich.  
Napier Saw Works, Inc.—see Clemson Bros., Inc.  
NASHUA—Electric Parts Corp.  
NASSAU—Industrial Lamp Corp.  
Natalie Machine & Tool Co., 339 Highway 17, Carlstadt, N. J.  
Nateco Corp., 327 Fifth Ave., Pittsburgh 22, Pa.  
NATIONAL—Brush Aboe, Inc.  
NATIONAL—Detjen Corp., Electrocuting Fly Screen Div.

National Acme Co., Electrical Mfg. Div., 170 E. 131 St., Cleveland 8, Ohio  
National Appliance Co., 4814 West Vernor Highway, Detroit 9, Michigan  
National Band & Tag Co., 721 York St., Newport, Kentucky  
National Carbon Co., Div. of Union Carbide & Carbon Corp., 30 E. 42 St., N. Y. 18, N. Y.  
National Copper & Smelting Co., 1862 East 123 St., Cleveland 6, Ohio  
National Decalcomania Corp., 236-38-40 N. 60 St., Phila. 39, Pa.  
National Electric Coil Co., 800 King Ave., Columbus 16, Ohio  
National Electric Controller Co., 7070 Glenwood Ave., Chicago 26, Ill.  
National Electric Fly Screen Co., Inc.—see Detjen Corp., Electrocuting Fly Screen Div.  
National Electric Products Corp., Gateway Center, 140 Stanwix St., Pittsburgh 22, Pa.  
National Electric Welding Machines Co., 1846-1916 North Trumbull St., Bay City, Michigan  
National Engineering & Mfg. Co., 16th & Lamine Sts., Sedalia, Mo.  
National Foam System, Inc., Union & Adams Sts., West Chester, Pa.  
National Gas Equipment Co., Inc., Denison, Tex.  
National Inter-Communicating Systems, Inc., 1130 North Milwaukee Ave., Chicago 22, Illinois  
National Lead Company, 111 Broadway, New York 6, New York  
National Pneumatic Co., Inc., 125 Amory St., Boston 19, Mass.  
National Pole & Treating Co.—see National Pole & Treating Div., Minnesota & Ontario Paper Co.  
National Pole & Treating Div., Minnesota & Ontario Paper Co., 500 Investors Bldg., Minneapolis 2, Minn.  
National Price Service—see Henderson Hazel Corp.  
National Radiator Co., Viking Air Conditioning Div., 5601 Walworth Ave., Cleveland 2, Ohio  
National Screw & Mfg. Co., Chester Hoist Div., Lisbon, Ohio  
National Specialties Co., Inc., 1902 Howell St., Fort Wayne 7, Indiana  
National-Standard Co., Wayne St., Niles, Mich.  
National Steel Construction Co., Inc., 301 Water St., Logansport, Ind.  
National Super Service Co., 1946 N. 13 St., Toledo, Ohio  
National Supply Co., Spang-Chalfant Div., Two Gateway Center (P. O. Box 416), Pittsburgh 30, Pennsylvania  
National Telephone Supply Co., 5100 Superior Ave., Cleveland 3, Ohio  
National Time & Signal Corp., 21800 Wyoming Ave., Detroit 37, Michigan  
National Varished Products Corp.—see Navair Corp.  
National Video Corp., 4300 W. 47 St., Chicago 32, Ill.  
NATSCO—National Time & Signal Corp.  
NATURLITE—Light & Power Utilities Corp.  
Natar Corp., 211 Randolph Ave., Woodbridge, New Jersey  
NEALE—Cable Spinning Equipment Co.  
NEARKEID—Snyder & Son, Inc., M. L.  
NEASBESTUS—National Electric Products Corp.  
NEBRO—Hilmet Wires, Inc.  
Neco Mfg. Co., Inc., Walnut, Van Buren & S. Wayne Sts., Auburn, Ind.  
Neco Tool & Engineering Co.—see Neco Mfg. Co., Inc.  
Neco Company, 88 Rumford Ave., Waltham 54, Massachusetts  
Nehring Electrical Works, 9th & Locust Sts., DeKalb, Illinois  
NELEX—Nelson Electric Mfg. Co.  
Nelson Div., Herman, American Air Filter Co., Inc., 215 Central Ave., Louisville 8, Ky.  
Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla.  
Nemco Electric Co., 210 Second Ave., Seattle 4, Washington  
NEMCO FLOOD—Nemco Electric Co.  
NEMCRAFT—Nemco Electric Co.  
Neo-Ray Products, Inc., 315 East 22nd St., New York 10, New York  
NEO-SOL—Charleston Rubber Co.  
NEO-TIME—Electric Controller & Mfg. Co.  
NEOLAY—United States Rubber Co.  
NEOLINE—Anaconda Wire & Cable Co.  
NEOSIGN—Anaconda Wire & Cable Co.  
NEOTEL—General Cable Corp.  
NEOTEX—Woodhead Co., Daniel  
NEOTROL—Electric Controller & Mfg. Co.  
NEPRO—National Electric Products Corp.  
NEPCODUCT—National Electric Products Corp.  
NEPCONOL—National Electric Products Corp.  
Neco Mfg. Co., 527 S. Wells St., Chicago 7, Ill.  
NEPTUNE—Washington Stove Works  
NERNST—Stupakoff Ceramic & Mfg. Co.  
Neuses, Inc., P. K., W. Euclid & Dwyer Sts., Arlington Heights, Ill.  
NEUTRO—Dunton Co., M. W.  
NEVER-CREEP—Chance Co., A. B.  
NEVER-STAIN—Nichols Wire & Aluminum Co.  
NEVERSLIP—Philadelphia Steel Wire Corp.  
New England Carbide Tool Co., Inc., 60 Brookline St., Cambridge 39, Massachusetts  
New England Electrical Works, Inc., 365 Main St., Lisbon, New Hampshire  
New Hampshire Ball Bearings, Inc., 20 Grove St., Peterborough, New Hampshire  
New Jersey Fire Alarm Co., Inc., 37 South Eighth St., Newark, New Jersey  
New Jersey Meter Co., 120 Waynewood Park, Plainfield, New Jersey  
New Jersey Porcelain Co., Inc., Plum St. & N. Y. Ave., P. O. Box 908, Trenton 5, N. J.  
New Jersey Zinc Sales Co., Inc., 160 Front St., N. Y. 38, N. Y.

# COMPANY AND TRADE NAME DIRECTORY

New London Instrument Co., Inc., Atlantic Transformer Div., 30 Hynes Ave., Groton, Conn.  
**NEW-MATIC**—Minneapolis-Honeywell Regulator Co.  
 New York Belting & Packing Co., 1 Market St., Passaic, N. J.  
 New York Fluorescent Mfg. Co., 162 Bowers, New York 12, N. Y.  
 New York & New Jersey Lubricant Co., 292 Madison Ave., N. Y. 17, N. Y.  
 New York Pooling Portable Elevator Co.—see Revolver Co.  
 Newane International, Inc., 235 E. 42 St., New York 17, N. Y.  
 Newcomb Audio Products Co., 6824 Lexington Ave., Hollywood 38, Calif.  
 Newcomb Spring Corp., 3902 Seventh Ave., Brooklyn 32, New York  
**NEWGARD**—Multi Electric Mfg., Inc.  
**NEWMAN**—Detex Watchclock Corp.  
 Newman Clock Co.—see Detex Watchclock Corp.  
 Newman Industries (America) Inc., 43 Broad St., New York 4, New York  
**NIAGARA**—Erie Electric Co., Inc.  
**NIAGARA**—Johnson Belting Co., Inc.  
 Niagara Transformer Co.—see Erie Electric Co., Inc.  
**NIAGRITE**—Johns-Manville  
**NICAD**—Nickel Cadmium Battery Corp.  
 Nice Ball Bearing Co., 30th & Hunting Park Ave., Philadelphia 40, Pennsylvania  
 Nichols Wire & Steel Co.—see Nichols Wire & Aluminum Co.  
 Nichols Wire & Aluminum Co., 1725 Rockingham Rd., Davenport, Iowa  
**NICUAR**—Arcos Corp.  
 Nicholson File Co., 1078 Frankford Ave., Philadelphia 25, Pennsylvania  
**NICHROME**—Driver-Harris Co.  
**NICKEL-ARC**—Allan Rods Company  
 Nickel Cadmium Battery Corp., Pleasant St., Easthampton, Massachusetts  
**NICKLEND**—Arcos Corp.  
**NICOPRESS**—Natl. Telephone Supply Co.  
**NICPO**—Freshend-Aire Div., Cory Corp.  
**NICIFIND**—Arcos Corp.  
**NIFER**—Metals & Controls Corp.  
**NIGHTINGALE**—Adjustable Fixture Co.  
**NIGHTROL**—Paragon Electric Company  
 Nikoh Tube Co., Div. of International Rolling Mill Products Corp., 5000 S. Whipple St., Chicago 32, Ill.  
**NILSTAIN**—Driver Co., Wilbur B.  
**NIMBLE-LITE**—Swifley Co., Inc.  
 Nineteen Hundred Corp.—see Whirlpool Corp.  
**NOOD APC**—Mid-States Welder Mfg. Co.  
**NITE-BEAM**—Eagle Electric Mfg. Co., Inc.  
**NITEAIR**—Lau Blower Co.  
**NITEHAWK**—Industrial Lamp Corp.  
**NITELIGHTER**—Fisher-Pierce Co., Inc.  
**NO-BATT**—Bristol Co.  
**NO-SPARK**—Co-operative Utilities Co., Inc.  
**NO FLAME COR**—Cornish Wire Co., Inc.  
**NO-LIFT**—Self-Lifting Piano Truck Co.  
**NO NOTCH**—Hilco Engineering Co.  
**NO-SHOK**—Bell Electric Company  
**NOARK**—Federal Electric Products Co.  
**NOBATRON**—Sorensen & Company, Inc.  
**NOBLELOY**—Continental Carbon, Inc.  
**NOBLETTE**—Continental Carbon, Inc.  
 Noblitt-Sparks Industries, Inc.—see Arvin Industries, Inc.  
**NOBRUSH**—Georator Corp.  
**NORSEAL**—Johns-Manville  
**NOKORODE**—Dunton Co., M. W.  
**NOLO**—Auburn Mfg. Co.  
 Noma-Lites, Inc., 55 West 13th St., New York 11, New York  
**NON-FLUID OIL**—New York & New Jersey Lubricant Co.  
**NON SKID**—Bridgport Hardware Mfg. Corp.  
**NONLINK POSITIVE**—Positive Lock Washer Co.  
**NORBIDE**—Norton Company  
**NORBLU**—Northern Blower Co.  
 Nordberg Mfg. Co., 3073 South Chase Ave., Milwaukee 1, Wisconsin  
 Norde Div., Borg-Warner Corp., Merchandise Mart Plaza, Chicago 54, Ill.  
**NORLICO**—Northern Light Co.  
 Norma-Hoffman Bearings Corp., Stamford, Conn.  
**NORSLOV**—Northwoods Mfg. Chemists, Inc.  
 North American Electric Lamp Co., 1014 Tyler St., St. Louis 6, Missouri  
 North Bros. Mfg. Co.—see Yankee Tools  
 North Electric Mfg. Co., 501 S. Market St., Gallion, Ohio  
**NORTH-LITE**—Great Northern Manufacturing Corp.  
**NORTH STAR**—Star Headlight & Lantern Co.  
**NORTHERN-AIRE**—Great Northern Mfg. Corp.  
 Northern Blower Co., 6433 Barbenton Ave., Cleveland 2, Ohio  
 Northern Electric Co., 5224 N. Kedzie Ave., Chicago, Ill.  
 Northern Incandescent Lamp Co., 1 Newark St., Hoboken, N. J.  
 Northern Light Company, 1661 North Water St., Milwaukee 2, Wisconsin  
 Northwestern Clock Co., 703 S. 16 St., Omaha 2, Neb.  
 Northwestern Electric Co., 1750 N. Springfield Ave., Chicago 47, Ill.  
**NORTHROP**—Ajax Electrothermic Corp.  
**NORTON**—Duff-Norton Co.  
 Norton Co., 1 New Bond St., Worcester 6, Mass.  
 Norton Electrical Instrument Co., 71 Hilliard St., Manchester, Conn.  
**NORTHWIND**—Emerson Electric Mfg. Co.  
 Northwoods Mfg. Chemists, Inc., Porterfield, Wis.  
 Notheffer Winding Labs., Inc., 120 Albemarle Ave., Trenton 3, N. J.  
 Novelty Lighting Corp., 2480 East 22 St., Cleveland 15, Ohio

**NOVOID**—G & W Electric Specialty Co.  
**NU-AIR**—Meier Electric & Machine Co., Inc.  
**NU-BRAZE**—American Silver Co., Inc., Industrial Div.  
**NU-CUT**—Snap-on Tools Corp.  
 Nu Process Products Laboratories—see Specialty Mfrs. & Distributors  
**NUARC**—Electric Arc, Inc.  
**NUBEL**—Edwards Co., Inc.  
**NUBLAC**—Star Porcelain Co.  
**NUCLEAR-CHICAGO**—Nuclear-Instrument & Chemical Corp.  
 Nuclear Instrument & Chemical Corp., 223 W. Erie St., Chicago 10, Ill.  
**NUCUT**—Heller Brothers Co.  
 Nukem Products Corp., 111 Colgate Ave., Buffalo 20, New York  
**NUKEMITE**  
**NULETE**—Dependable-Elec. Mfg. Co., Inc.  
**NUMECHRON**—Penwood Numechron Co.  
 NuTone, Inc., Madison & Red Bank Rds., Cincinnati 27, Ohio  
 Nutting Truck and Caster Co., 1201 W. Division St., Fairbault, Minn.  
**NYALITE**—Electric Auto-Lite Co., Wire and Cable Div.  
**NYCAP**—Buck Electrical Mfg. Co.  
 Nye Tool Co., 4120-30 W. Fullerton Ave., Chicago 39, Ill.  
**NYLAFLOW**—Polymer Corp. of Pa.  
**NYLASINT**—Polymer Corp. of Pa.  
**NYLATRON**—Polymer Corp. of Pa.  
**NYLAWELD**—Polymer Corp. of Pa.  
**NYLINED**—Thomson Industries, Inc.  
**O-E**—Arrow Expansion Bolt Co.  
**OK**—Apollon Rubber Co., Inc.  
**OK**—General Cable Corp.  
**OK**—Henderson Electric Co.  
**O S**—American Nut & Bolt Fastener Co.  
**OTC**—Owatonna Tool Co.  
**O-Z**—Zernickow Company, O.  
**O-Z**—Electrical Mfg. Co., Inc., 262 Bond St., Brooklyn 17, N. Y.  
**OAKMONT**—Amer. Radiator & Stand. Sanitary Corp.  
**OAMCO**—Overbrook & Ayres Mfg. Co.  
**OASIS**—Ecco Manufacturing Co.  
**OBRUND**—Crouse-Hinds Co.  
 Oceanic Electric Products Corp., 187 Water St., New York 38, N. Y.  
 Ocam Corp., Seneca Falls, New York  
**OCT-DUCT**—Soapstone Duct Co.  
**OCTA-TIRE**—Millerbernd Manufacturing Co.  
**OCTO-GRIP**—Snap-on Tools Corp.  
**OCTOPIUS**—Chelsea Fan & Blower Co., Inc.  
**OCULITE**—Burton Mfg. Co.  
 Odin Stove Mfg. Co.—see Dearborn Stove Co.  
**ODIS**—Old Dominion Iron & Steel Corp.  
**ODOR-OUT**—House-O-Lite Corp.  
**ODOR-RIDO**—Standard Products Corp.  
**ODOROUT**—Westinghouse Electric Corp., Lamp Div.  
**OFFICER**—Benjamin Electric Mfg. Co.  
**OHIO**—Republic Steel Corp., Chain Div.  
**OHIO**—Round Bridgeport Chain & Mfg. Co.  
 Ohio Brass Co., 390 N. Main St., Mansfield, Ohio  
 Ohio Carbon Co., 12508 Berea Rd., Cleveland 11, Ohio  
 Ohio Crankshaft Co., TOCCO Div., 3800 Harvard Ave., Cleveland 1, Ohio  
 Ohio Grease Co., 515-519 N. Spring St., Loudonville, Ohio  
 Ohio Window Glass Co., 4045 St. Clair Ave., Cleveland 14, Ohio  
**OHIOGIL**—Ohio Grease Co.  
 Ohmite Mfg. Co., 3601 Howard St., Skokie, Ill.  
**OHMOID**—Wilmington Fibre Specialty Co.  
**OHMSPUN**—States Co.  
**OHMSTONE**—Johns-Manville  
**OIL-EX**—Ton-Tex Corp.  
**OIL-MITE**—Tobé Deutschmann Corp.  
**OIL-SIG**—New Jersey Meter Co.  
**OIL TITE**—Westinghouse Electric Corp.  
**OILRAULIC**—Rotary Lift Co.  
**OILIFTER**—A-P Controls Corp.  
**OILITE**—Amolex Div., Chrysler Corp.  
**OKLIP**—Burdny Engineering Company, Inc.  
**OKOLITE**—Okonite Co.  
 Okonite Co., 220 Passaic St., Passaic, New Jersey  
 Okonite-Calender Cable Co.—see Okonite Co.  
**OKOTHERM**—Okonite Co.  
 Okun Co., A. L., 109-02 Van Wyck Expressway, So. Ozone Park, L. I. 20, N. Y.  
 Old Dominion Iron & Steel Corp., Belle Isle, Richmond 3, Va.  
 Oldforge Tool Co.—see Quality Tools Corp.  
 Olin Industries, Inc., Ramset Fasteners, Inc. Div., 1217 Berea Rd., Cleveland 11, Ohio  
 Olin Mathieson Chemical Corp., Electrical Div., New Haven 4, Conn.  
 Oliver Iron & Steel Corp., 1014 Oliver Bldg., Pittsburgh 22, Pa.  
**OLOF**—Thompson, Inc., O.  
**OLOTAN**—Ton-Tex Corp.  
**OLYMPIA**—Benjamin Electric Mfg. Co.  
**OLYMPIC**—Lint, Clyde W.  
**OLYMPIC**—Washington Stove Works  
 Olympic Instrument Laboratories, P. O. Box 62, Cove, Wash.  
**OMEGA-PLEX**—Wakefield Co.  
**OMNI-GLOW**—Industrial Devices, Inc.  
 On-A-Lite Corp., 113 Circle Rd., Peoria 5, Illinois  
 Onan & Sons, Inc., D. W., University Ave., Southeast at 25th., Minneapolis 14, Minnesota  
**ONE-SHOT**—Tal Bender, Inc.  
**"1000" LINE**—Wakefield Co.  
**ONE TIME**—Ware Fuse Corp.  
 O'Neill-Irwin Mfg. Co., 427 Eighth Ave., Lake City, Minn.

Onsrud Machine Works, Inc., Motor Div., 3900 W. Palmer St., Chicago 47, Ill.  
**Op-Al** Electric & Mfg. Co., 809 N. Senate Ave., Indianapolis 2, Ind.  
**Opad** Electric Co., 69 Murray St., New York 7, N. Y.  
**Opad-Green** Co.—see Opad Electric Co.  
**OPALITE**—Lightolier, Inc.  
**OPALON**—Monsanto Chemical Co., Plastics Div.  
**Operadio** Mfg. Co.—see Dukane Corp.  
**OPTIPLEX**—Lightolier, Inc.  
**OPTO-MATIC**—Trico Fuse Mfg. Co.  
 Orange Roller Bearing Co., Inc., 557 Main St., Orange, New Jersey  
 Orangeburg Manufacturing Co., Inc., Orangeburg, N. Y.  
 Oranville Mfg. Co., Oranville, Pennsylvania  
**ORGEBLOS**—Spencer Turbine Co.  
 Orley Corp.—see Orley Freezers, Inc.  
 Orley Bros. Co., Inc.—see Orley Freezers, Inc.  
 Orley Freezers, Inc., 475 Schaefer Rd., Detroit 17, Mich.  
**ORTHO**—Gibson Mfg. Co.  
**ORTO**—Line Material Co.  
**OSMOPLASTIC**—Osmose Wood Preserving Co. of America, Inc.  
 Osmose Wood Preserving Co. of America, Inc., 980 Ellicott St., Buffalo 9, N. Y.  
 Oster Mfg. Co., 2046 E. 61 Pl., Cleveland 3, Ohio  
 Oster Manufacturing Co., John, 1 Main St., Racine, Wisconsin  
**OSTERETT**—Oster Manufacturing Co., John  
**OSTERIZER**—Oster Manufacturing Co., John  
 Otis Elevator Co., 260 Eleventh Ave., N. Y. 1, N. Y.  
**OUR PRIDE**—Champion DeArment Tool Co.  
**OVALDUCT**—National Electric Products Corp.  
**OVALITE**—Line Material Co.  
**OVALTUBE**—Plastoid Corp.  
 Overbagh & Ayres Mfg. Co., 411 South Clinton St., Chicago 7, Illinois  
 Overlakes Corp., Lowell Insulated Wire Div., 171 Lincoln St., Lowell, Mass.  
 Overly-Hautz Co., 11500 Madison Ave., Cleveland 2, Ohio  
**OVERTON**—Remington Corp., Remington Air Conditioning Div.  
 Oviatt Co., D. C., 2174 Lakeside Ave., Cleveland 14, Ohio  
 Owatonna Tool Co., 250 North Cedar St., Owatonna, Minnesota  
**OXOFF**—Anaconda Wire & Cable Co.  
 Oxwall Products Mfg. Co., Inc.—see Oxwall Tool Co., Ltd.  
 Oxwall Tool Co., Ltd., 928 Broadway, New York 10, N. Y.  
**OXWELD**—Linde Air Products Co.  
**OZITE**—G & W Electric Specialty Co.  
**OZONE-LITE**—New York Fluorescent Mfg. Co.

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**P-A-B-X**—Automatic Electric Co.  
**PAD**, Inc.—see Producers and Distributors, Inc.  
**P-A-X**—Automatic Electric Co.  
**P & C** Hand Forged Tool Co., Box 5926, Milwaukee 10, Portland 22, Oregon  
**PCP**—Osmose Wood Preserving Co.  
**P-D**—Thermobloc Div., Pratt-Daniel Corp.  
**P.D.C.P.**—Phelps Dodge Copper Products Corp.  
**PD-X**—Phelps Dodge Copper Products Corp.  
**P-G**—Post-Glover Electric Co.  
**P&H**—Page & Hill, Inc.  
**PHD**—Line Material Co.  
**PID**—Line Material Co.  
**PIDG**—Aircraft-Marine Products, Inc.  
**P.I.V.**—Link-Belt Co.  
**PM** Electrical Products, Inc., 203 N. Wabash Ave., Suite 2118, Chicago 1, Ill.  
**PMD**—Columbia Technical Corp.  
**P.M.G.**—Phelps Dodge Copper Products Corp.  
**P-N**—Pyle-National Co.  
**PHD**—Line Material Co.  
**P Q**—Pekco Company  
**PR**—Plymouth Rubber Co.  
**P&R**—Potter & Kayfield, Inc.  
**P&S**—Pass & Seymour, Inc.  
**PTC**—Precision Transformer Corp.  
**PVD**—Line Material Co.  
**P&W**—Partrick & Wilkins Co.  
**PWC**—Plastic Wire & Cable Corp.  
**PACE MAKER**—Hubbell, Inc., Harvey  
**PACEMAKER**—Lightolier  
**PACEMAKER**—Remington Corp., Remington Air Conditioning Div.  
**PACEMAKER**—Steam Electric Mfg. Co.  
**PACEMAKER**—Wakefield Co.  
 Pacific Car and Foundry Co., 4th & Factory, Renton, Wash.  
 Pacific Electric Mfg. Co.—see Federal Pacific Electric Co.  
 Pacific Transducer Corp., 11836 W. Pico Blvd., Los Angeles 64, Calif.  
 Pacific Transformer Co.—see Transformer Engineers  
 Pacific Transformer Co., Inc.—see Western Pacific Transformer Co., Inc.  
 Pacific Union Metal Co., 3248 Long Beach Ave., P. O. Box 2616 Terminal Annex, Los Angeles 54, California  
**PACIFIX**—Wesix Electric Heater Co.  
 Packard Electric Div., General Motors Corp., Warren, Ohio  
 Page & Hill, Inc., 1017 Plymouth Bldg., Minneapolis 3, Minnesota  
 Page Steel & Wire Div., American Chain & Cable Co., Inc., First & River Sts., Monessen, Pa.  
 Paine Company, Fullerton Ave., & Westgate Rd., Addison, Illinois  
**PAL**—Palnut Company  
**PAL**—Ross Operating Valve Co.  
 Paley Mfg. Corp.—see Circle Air Products, Inc.

# COMPANY AND TRADE NAME DIRECTORY

PALLET OX—Barrett-Cravens Co.  
Palmer Wellcut Tool Corp., Meadville, Pa.  
Palmer Corp., 61 Cordier St., Irvington 11, New Jersey  
PAMCO—Paraplegics Manufacturing Co., Inc.  
Pan American Electronics Co., 308 Chestnut St., Nashville 10, Tenn.  
PAN-LITE—Alden Products Co.  
PAN-L-HEAT—Jensen Specialties, Inc.  
Panalarm Div., Panellit, Inc., 7401 N. Hamlin Ave., Skokie, Ill.  
Panalarm Products, Inc.—see Panalarm Div.  
PANCAKE—Wiremold Company  
PANDUX—Pacific Transducer Corp.  
PANEL-GLO—Benjamin Electric Mfg. Co.  
PANELGRAPH—Panellit, Inc.  
Panellit, Inc., 7401 Hamlin, Skokie, Ill.  
PANELUX—Lighting Products, Inc.  
Panelyte Div., St. Regis Paper Co., 230 Park Ave., N. Y. 17, N. Y.  
PAPCO—Penn Brass & Copper Co.  
PAPOOSE—Capewell Mfg. Co.  
PAR-BEAM-LITE—Swiveller Co., Inc.  
PARA-THERM—Paranite Wire & Cable Div., Essex Wire Corp.  
PARABOLITE—Gibson Mfg. Co.  
PARACORE—United States Rubber Co.  
PARADUCT—Paranite Wire & Cable Div., Essex Wire Corp.  
PARAGON—Campbell-Hausfeld Co.  
PARAFLEX—Paranite Wire & Cable Div., Essex Wire Corp.  
Paragon Electric Co., 1600-1614 12th St., Two Rivers, Wis.  
PARAGROOVE—Line Material Co.  
PARALINE—Allis-Chalmers Manufacturing Co.  
PARAMOUNT—Hartz-Mason, Inc.  
Paramount Industries, Inc., G-1080 Ballenger Rd., Flint 4, Michigan  
Paranite Wire and Cable Div., Essex Wire Corp., 1601 Wall St., Ft. Wayne 6, Ind.  
PARAPLASTIC—Hartz-Mason, Inc.  
PARAPRENE—Paranite Wire & Cable Div., Essex Wire Corp.  
PARASYN—Paranite Wire & Cable Div., Essex Wire Corp.  
PARATWIN—Paranite Wire & Cable Div., Essex Wire Corp.  
PARAUSE—Paranite Wire & Cable Div., Essex Wire Corp.  
Parco Mfg. Co.—see Rogers Electric Laboratories, Inc.  
PARK AVENUE—General Lamps Mfg. Corp.  
Park Metalware Co., Inc.—see Xcelite, Inc.  
Parker Co., Charles, 50 Hanover St., Meriden Conn.  
Parker Electrical Mfg. Co., 221 Washington St., Oakland 7, California  
Parker Mfg. Co., 149 Washington St., Worcester 1, Mass.  
Parker McCrory Mfg. Co., 2609 Walnut St., Kansas City 8, Missouri  
PARMAK—Parker McCrory Mfg. Co.  
Parr Electric Co.—see Parr Mfg. Corp.  
Parr Mfg. Corp., 44 Austin St., Newark 5, N. J.  
Partlow Corp., 2 Campton Rd., New Hartford, New York  
Partrick, Carter & Wilkins Co.—see Partrick & Wilkins Co.  
Partrick & Wilkins Co., 51 N. Seventh St., Phila. 6, Pa.  
Partridge Lumber Co., T. M., 731 Lumber Exchange Bldg., Minneapolis 1, Minnesota  
Pass & Seymour, Inc., Syracuse 9, New York  
PASSMOUR—Pass & Seymour, Inc.  
PATENT-FLEX—Wil-Son Manufacturing Co.  
Patent Scaffolding Co., Inc., 38-21 12th St., L.I.C. 1, N. Y.  
PATROL—Dexet Watchlock Corp.  
PATTERN-LITE—Keystone Electric Mfg. Co.  
PATTERNILITE—Associated Lighting Service  
PAYMASTER—Cincinnati Time Recorder Co.  
Peck & Harvey Mfg. Corp., 5650 N. Western Ave., Chicago 45, Ill.  
Peck, Slow & Wilcox Co., Subsidiary of Billings & Spencer Co., 274 Center St., Southington, Conn.  
PECO—Power Equipment Co.  
Peco-McClintock—see Protection Equipment Co., Inc.  
Pedrick Tool and Machine Co., 3640 N. Lawrence St., Phila. Pa.  
PEDRIFUGAL—Allis-Chalmers Manufacturing Co.  
PEE-WEE—Mueller Electric Co.  
Peele Company, 47 Stewart Ave., Brooklyn 37, New York  
PEEP SPOT—Neo-Ray Products, Inc.  
Peer, Inc., 1200 Milton St., Benton Harbor, Michigan  
PEERLESS—Electric Service Manufacturing Company  
PEERLESS—General Cable Corp.  
PEERLESS—Plastic Wire & Cable Corp.  
PEERLESS—U. S. Rubber Co.  
Peerless Electric Co., 1401 West Market St., Warren, Ohio  
Peerless Machine Co., 1600 Junction Ave., Racine, Wis.  
Peerless Mfg. Co.—see Valley Fan Mfg. Co.  
Peerless Manufacturing Corp., 1400 West Ormsby Ave., Louisville 10, Kentucky  
PEERLESS SD—General Cable Corp.  
PEERLITE—Guth Company, Edwin F.  
Pekus Company, 1227 McDonald Ave., Brooklyn 30, New York  
Pelham Elect. Mfg. Corp., 16th & German St., Erie, Pennsylvania  
PELOK—Pelham Electric Mfg.  
PEMCO—Parker Electrical Mfg. Co.  
PEMCO—Philadelphia Electrical & Mfg. Co.  
PENDLUM—Versen Company, Kurt  
PENDOME—Versen Company, Kurt  
Penetone Co., 74 Hudson Ave., Tenafly, N. J.  
Penetrax Corp.—see Verd-A-Ray Corp.  
PENETROX—Burdny Engineering Co., Inc.

PENFIELD—Wood Company, John  
PENGO—Petersen Engineering Co., Mfrs.  
PENN—Solar Electric Corp.  
Penn Brass & Copper Co., 20th & Powell Ave., Erie, Pennsylvania  
Penn Controls, Inc., Goshen, Indiana  
Penn Electric Switch Co.—see Penn Controls, Inc.  
Penn Fibre & Specialty Co., Inc., 2024 E. Westmoreland St., Phila. 34, Pa.  
Penn Fluorescent Light Mfg. Co., Wm., 1429-30-31 South 23 St., Philadelphia 46, Pennsylvania  
Penn Industrial Instrument Corp.—see Penn Industrial Instrument Div., Burgess Manning Co.  
Penn Industrial Instrument Div., Burgess Manning Co., 4110 Haverford Ave., Phila. 4, Pa.  
PENN LITE—Penn Fluorescent Light Mfg. Co., Wm. Penn-Union Electric Corp., 315 State St., Erie, Pa.  
PENNSBURG—Penn Fluorescent Light Mfg. Co., Wm. Pennsylvania Transformer Co., Div. McGraw Electric Co., Box 330, Canonsburg, Pennsylvania  
Pennwood Numechrom Co., 7249-51 Franktown Ave., Pittsburgh 8, Pennsylvania  
PENOLENE—Penetone Co.  
PENOTE—Cleveland Trencher Co.  
PENTA—Chapman Chemical Co.  
PENTA—Page & Hill Inc.  
PERITOX—Osmose Wood Preserving Co. of America, Inc.  
PERECO—Pereny Equipment Co.  
Pereny Equipment Co., 893 Chambers Road, Station A (Box 153), Columbus Ohio  
Perfect-Line Mfg. Corp., P. O. Box 65, Old Country Rd. & R. R. Ave., Hicksville, New York  
PERFECTAIRE—Perfect-Line Mfg. Corp.  
PERFECTION—Boston Woven Hose & Rubber Co.  
Perfection Industries, Inc., 7609 Platt Ave., Cleveland 4, Ohio  
Perfection Stove Co.—see Perfection Industries, Inc.  
Perkin Engineering Corp., 345 Kansas St., El Segundo, California  
Perkins Appliance Co.—see Perkins Machine & Gear Co.  
Perkins Battery Co., 1601 Monroe St., York, Pa.  
Perkins Machine & Gear Co., Circuit Ave., West Springfield, Massachusetts  
PERM-ALIGN—Cummins Portable Tool Div., John Oster Mfg. Co.  
PERMA-DURE—Phelps Dodge Copper Products Corp.  
PERMA WICK—Tann Corp., Congress Drives Div.  
Permacel Tape Corp., U. S. Highway 1, New Brunswick, N. J.  
PERMAFLECTOR—Pittsburgh Reflector Co.  
PERMAKEY—Motorola Communications & Electronics Inc.  
PERMALLOY—Arnold Engineering Co.  
Permanent Magnet Co., Inc., 4437 Bragdon St., Lawrence 26, Indiana  
Permanente Products Co.—see Kaiser Aluminum & Chemical Sales, Inc.  
PERMAPAPER—Sanborn Co.  
PERMAPRENE—Hatfield Wire and Cable Div., Continental Copper and Steel Industries, Inc.  
PERMATOX—Chapman Chemical Co.  
PERMO—Hardman Co. Inc., H. V.  
Peschel Electronics, Inc., 13 Garden St., New Rochelle, N. Y.  
PET—Portable Electric Tools, Inc.  
Petersen Engineering Co., Mfrs., 460 Kifer Rd., Santa Clara, Calif.  
Petersen Mfg. Co., Inc., DeWitt, Neb.  
PETTER—Brush Abbe, Inc.  
PEXTO—Peck, Slow & Wilcox Co.  
Pfanziehl Chemical Co., Chemical Div.—see Pfanziehl Laboratories, Inc.  
Pfanziehl Laboratories, Inc., 104 Lake View Ave., Waukegan, Ill.  
Phalo Plastics Corp., 25 Foster St., Worcester 8, Massachusetts  
PHALO TRAN—Phalo Plastics Corp.  
PHALO-X—Phalo Plastics Corp.  
PHALOM—Phalo Plastics Corp.  
PHAN—Polair Cooler Co., Inc., Phoenix Phan Div.  
PHASOMETER—Venus Products Co.  
Phelps Dodge Copper Products Corp., 40 Wall St., New York 5, New York  
Phelps Fan Mfg. Co., 715 Thomas St., Little Rock, Ark.  
Phelps Manufacturing Co.—see Phelps Fan Mfg. Co.  
PHENOFLEX—Blonite Co., Inc.  
PHENOWELD—Hardman Co. Inc., H. V.  
PHIL-TROL—Phillips Control Co.  
Philadelphia Electrical & Mfg. Co., 1200-36 North 31 St., Philadelphia 21, Pennsylvania  
Philadelphia Gear Works, Inc., G St. below Erie Ave., Philadelphia 34, Pennsylvania  
Philadelphia Steel & Wire Corp., Penn St. & Belfield Ave., Philadelphia 44, Pennsylvania  
Philco Corp., Tioga & C Sts., Phila. 34, Pa.  
PHILLITE—Ruby-Phillite Corp.  
PHILLIE GEAR—Philadelphia Gear Works, Inc.  
Phillips Co., Oscar, Box 78, Station 1, Cincinnati 29, Ohio  
Phillips Control Corp., Div. of Thor Corp., 59 W. Washington St., Joliet, Ill.  
Phillips Mfg. Co., Inc., 2816 Aldrich Ave., S., Minneapolis 8, Minn.  
Phoenix Phan Div., Polair Cooler Co., Inc., 112 S. 8th Ave., Phoenix, Ariz.  
Phoenix Fan and Blower Mfg. Co.—see Phoenix Phan Div., Polair Cooler Co., Inc.  
PHOMADE—Pyrene Manufacturing Co.  
PHOMARENE—Pyrene Manufacturing Co.  
PHOMENE—Pyrene Manufacturing Co.  
PHONACALL—Sperli Faraday Inc.  
PHONETALARM—American District Telegraph Co.  
PHOSCO—United Wire & Supply Corp.  
PHOSON—United Wire & Supply Corp.  
Phosphor Bronze Corp., 20 Franklin St., Seymour, Connecticut

Phosphor Bronze Smelting Co.—see Phosphor Bronze Corp.  
PHOSTUBE—All-State Welding Alloys Co. Inc.  
PHOTO-TROLLER—Westinghouse Electric Corp.  
Photobell Co., 43 Vesey St., New York 7, N. Y.  
PHOTOSWITCH—Electronics Corp. of America  
Photoswitch, Inc.—see Electronics Corp. of America  
Photovolt Corp., 95 Madison Ave., N. Y. 16, N. Y.  
PHOTOX—Westinghouse Electric Corp.  
PHOTRONIC—Weston Electrical Instrument Corp.  
PICO CALDWELL-LITE—Plastic Illuminating Co., Inc.  
Pier Equipment Mfg. Co.—see Pier, Inc.  
Pierce Renewable Fuses, Inc., Box F, Leicester, New York  
PIERCEWAY—Clifton Conduit Co., Inc.  
PIGMY—Capewell Mfg. Co.  
PILOTSTAT—Minneapolis-Honeywell Regulator Co.  
PIN-UP—Sun Kraft Health Products, Inc.  
Pines Engineering Co., Inc., 601 Walnut St., Aurora, Ill.  
PIONEER—Crown Controls Co. Inc.  
PIONEER—Holdenline Co.  
Pioneer Electrical Mfrs.—see Cutler-Hammer, Inc.  
Pioneer Pump Div., Detroit Harvester Co., 14300 Tireman Ave., Detroit 28, Mich.  
Pioneer Pump & Manufacturing Co.—see Pioneer Pump Div., Detroit Harvester Co.  
Pipe Coupling Mfrs., Inc., P. O. Box 488, Martins Ferry, Ohio  
PIPE MASTER—Oster Mfg. Co.  
PIPEMASTER—Erie Tool Works  
Piqua Machine & Mfg. Co., 441 S. College St., Piqua, Ohio  
PIRAC—Electri-Cord Manufacturing Co. Inc.  
PISTOGRIP—Wall Manufacturing Co., P.  
PITCHLIGN—Roller Bearing Company of America  
Pittsburgh Reflector Co., Oliver Bldg., Pittsburgh 22, Pennsylvania  
Pittsburgh Screw and Bolt Corp., P. O. Box 1708, Pittsburgh 30, Pa.  
Pittsburgh Standard Conduit Co., 61 Bridge St., Pittsburgh 23, Pa.  
Pitz Foundry Inc., American Hydovac Div., 290 Scholes St., Brooklyn 5, N. Y.  
PLANEWELD—Lincoln Electric Co.  
PLANTE—Gould-National Batteries, Inc.  
PLANTMAID—Handling Devices Co., Inc.  
PLANTMAID—Handling Devices Co., Inc.  
PLASBRAND—Brand & Co., Inc., William  
PLASCENE—Chester Cable Corp.  
Plaskon Div., Allied Chemical & Dye Corp.  
Plaskon Div., Libbey-Owens-Ford Glass Co.—see Barrett Div., Allied Chemical & Dye Corp.  
Plaster-Eye Company, 2560 Nobletown Rd., Pittsburgh 5, Pennsylvania  
PLASTI-GRIP—Aircraft-Marine Products, Inc.  
PLASTI-GROMMET—Shakeproof Div., Illinois Tool Works  
PLASTI-PLUG—Shakeproof Div., Illinois Tool Works  
PLASTI-RING—Shakeproof Div., Illinois Tool Works  
PLASTI-RIVET—Shakeproof Div., Illinois Tool Works  
Plastic Illuminating Co., Inc., 101 Park Ave., N. Y. 17, N. Y.  
Plastic Wire & Cable Corp., East Main St., Jewett City, Connecticut  
PLASTICELL—C & D Batteries, Inc.  
PLASTICAL—C & D Batteries, Inc.  
PLASTICLINER—Duro-Test Corp.  
PLASTICORD—Chester Cable Corp.  
PLASTICORE—Chester Cable Corp.  
PLASTICOTE—Chester Cable Corp.  
Plasticraft, Inc.—see Mastercraft Plastics Co., Inc.  
Plasticraft Products Co., 1 Station Plaza, West Nyack, New York  
PLASTILIFE—David's Gloves, Inc.  
PLASTISEL—Electronic-Devices, Inc.  
PLASTITE—Whitney Blake Company  
Plastoid Corp., 42-61 24th St., L.I.C. 1, N. Y.  
PLATEGRIP—Armstrong-Bray & Co.  
Plating Processes Co., Div. of Industrial Chromium Corp., 109 Lyman St., Holyoke, Mass.  
Platt Corp., 1415 Key Highway, Baltimore 30, Md.  
PLEXI-TONE—Penn Fluorescent Light Mfg. Co., Wm.  
PLEXICON—Erie Resistor Corp.  
PLEXILUX—Sun-Lite Manufacturing Co.  
PLEXLUME—Gruber Lighting  
PLEXOLINE—Day-Brite Lighting, Inc.  
PLI-A-BAND—Memo Engineering & Mfg. Co., Inc.  
PLIA-CABLE—Empire Wire & Cable Co.  
Plug-In Div., Electronic Engineering Co. of Calif., 180 S. Alvarado St., Los Angeles 37, Calif.  
PLUG-IN—National Electric Products Corp.  
PLUG-IN—Square D Co.  
PLUG MOLD—Wiremold Company  
Plume & Atwood Mfg. Co., 440 Bank St., Waterbury, Conn.  
Plummer Spray Equipment Co., 700 Filmore St., Napoleon, Ohio  
PLUS-POWER—Ramset Fasteners, Inc.  
PLYMOUTH—Gray & Dudley Company  
Plymouth Rubber Co., Inc., 23 Revere St., Canton, Mass.  
PNEOLATOR—Mine Safety Appliances Co.  
PNEU-DRAULIC—Allis-Chalmers Mfg. Co.  
POCKETSCOPE—Waterman Products Co., Inc.  
POCO—Pure Oil Co.  
Polair Cooler Co., Inc., Phoenix Phan Div., 112 S. 8th Ave., Phoenix, Ariz.  
POLAR CUB—Gilbert Co., A. C.  
POLARIS—Mitchell Mfg. Co.  
POLEMASTER—Klein & Sons, Mathias  
Poles, Inc., East 706 Sprague Ave., Spokane 3, Wash.  
POLICARB—Driver Co., Wilbur B.  
Polar Mfg. Co., J. D., 2904 W. 26 St., Chicago 23, Ill.  
Poliak Corp., Joseph, 81-95 Freeport St., Boston 22, Mass.  
Poliak Luminescent Corp., 732 South Federal St., Chicago 5, Illinois



POLY-ROPE—Industrial Products Co.  
Polyken Products Dept., Kendall Co., 222 W. Adams St., Chicago 6, Ill.  
Polymer Corp. of Pa., Reading, Pa.  
POLYPENCO—Polymer Corp. of Pa.  
POLYRANGER—Sensitive Research Instrument Corp.  
POMONA—Fairbanks, Morse & Co.  
POP-O-MATIC—Dominion Electric Corp.  
POPPER CHEF—Dominion Electric Corp.  
Porcelain Products, Inc., P. O. Box 300, Findlay, Ohio  
PORT-A-POWY—Thread-Ezy Mfg. Co.  
PORT-O-Vox Corp., 521 W. 43 St., New York 36, N. Y.  
PORTA-FLEX—Gardner Products Co.  
PORTA-KALL—Loge Sound Engineers, J. M.  
Portable Electric Tools, Inc., 320 West 83 St., Chicago 20, Illinois  
Portable Light Co., Inc., 216 William St., N. Y. 38, N. Y.  
PORTAIR—Coppus Engineering Corp.  
PORTALITE—Carpenter Manufacturing Co.  
Porter-Cable Machine Co., 1714 North Salina St., Syracuse 8, New York  
Porter Metal Products Inc.—see Kent Metal Mfg. Co. Inc.  
Portland-Monson Slate Co., 465 Congress St., Portland 3, Maine  
PORT-O-REEL—Industrial Electrical Works  
PORTO-Hessel Co., Inc., W.  
PORTO-POWER—Blackhawk Mfg. Co.  
PORTO-SHEARS—Black & Decker Mfg. Co.  
PORTOSTRIP—Hessel Company, Inc., W. F.  
POSITECT—S & C Electric Company  
Positive Lock Washer Co., Avenue A & Miller St., Newark 5, New Jersey  
POSITROL—S & C Electric Company  
Post-Glover Electric Co., 221 West Third St., Cincinnati 2, Ohio  
POST-LITE—Great Northern Manufacturing Corp.  
Post Machinery Co., Electronic Products Div., 140 Elliott St., Beverly, Mass.  
POSTUP—Holophone Co. Inc.  
Potter & Brumfield, 64 East Road, Princeton, Indiana  
Potter Instrument Co., Inc., 115 Cutter Mill Rd., Great Neck, New York  
Potter & Rayfield, Inc., P. O. Box 1042, Atlanta, Ga.  
POW-R-LITE—Continental Battery Mfg. Corp.  
POWACALL—Edwards Co., Inc.  
Powder Power Tool Corp., 7526 Southwest Macadam Ave., Portland 1, Oregon  
POWER-BLOW—Master Vibrator Co.  
POWER BOOSTER—McColpin-Christie Corp.  
POWER CHARGER—Fox Products Co.  
POWER CHIEF—Nordberg Mfg. Co.  
POWER DRIVE—Oster Mfg. Co.  
Power Equipment Co., 5740 Nevada, East, Detroit 34, Mich.  
POWER MASTER—Lewis-Shepard Products, Inc.  
POWER OX—Barrett-Cravens Co.  
Power Plant, Inc.—see Electric Power Plants Corp.  
POWER-POISE—Brown-Brockmeyer Co.  
POWER-STREAK—American Electric Cable Co.  
POWER-STYLE—Square D Co.  
POWER-TWIN—Owatonna Tool Co.  
POWERAIR—Westinghouse Electric Corp., Electric Appliance Div.  
POWERBEL—Auth Electric Company, Inc.  
POWERCONS—Cornell-Dubilier Electric Corp.  
Powercraft Corp., 2215 DeKalb St., St. Louis 4, Mo.  
POWERDUCT—Anaconda Wire & Cable Co.  
POWEREEL—Industrial Electrical Works  
POWERFLEX—Thermoid Co.  
POWERHOUSE—Fairchild Camera & Instrument Corp., Fairchild Industries Div.  
POWERLINE—Chelsea Fan & Blower Co., Inc.  
POWERPACK—Sperli Farraday Inc.  
POWERPILE—Minneapolis-Honeywell Regulator Co.  
POWERPLUG—Adam Electric Co., Frank  
POWERS-AMERICAN—McCabe-Powers Auto Body Co.  
POWERSEAL—Electronic Devices, Inc.  
POWERSTAT—Mercoid Corp.  
POWERSTAT—Superior Electric Co.  
POWER-PAK—Winpower Mfg. Co.  
POWER-RIB—Ohmite Manufacturing Co.  
Powerex Switch Co., 36 Pleasant St., Watertown, Mass.  
POWERWORKER—Clark Equipment Co.  
Practical Electric Products Inc., 330 E. 148 St., Bronx 51, N. Y.  
PRAIRIE SCHOOENER—Lennox Furnace Co.  
PRAK-T-KAL—Practical Electric Products Inc.  
Pratt Daniel Corp., Thermobloc Div., 2 Meadow St., South Norwalk, Conn.  
Pratt Co., Henry, 2222 S. Halsted St., Chicago 8, Ill.  
Pratt & Cady Co.—see R-P & C Valve Div., American Chain & Cable Co., Inc.  
PRAYER LIGHT—Aerolux Lights Corp.  
Pre-Fab Heater Co., 103 Boston St., Guilford, Conn.  
PRE-INSULATED—Aircraft-Marine Products, Inc.  
PRE-MARX—Chisholm-Ryder Co., Inc., Premax Products Div.  
PRECIPITRON—Westinghouse Elec. Corp., Sturtevant Div.  
Precision Extrusions, 720 E. Green Ave., Bensenville, Ill.  
Precision Thermometer & Instrument Co., 1434 Brandwyne St., Philadelphia 30, Pa.  
Precision Transformer Corp., 660 West Grand Ave., Chicago 10, Illinois  
Precision Tube Co., Inc., Wissahickon Ave. & Church Rd., North Wales, Pennsylvania  
Precision Welder Mfg. Co., 660 W. Grand Ave., Chicago 10, Ill.  
PREENX—General Electric Co.  
Preformed Line Products Co., 5349 St. Clair Ave., Cleveland 3, Ohio  
PREGWOOD—Formica Co.  
Premax Products Div., Chisholm-Ryder Co., Inc., College & Highland Aves., Niagara Falls, N. Y.

Prentice Products Co., Lincoln Highway East, Fort Wayne, Indiana  
Prentiss Wabers Products Co.—see Preway, Inc.  
PREPO—Appleton Electric Co.  
Prepo Corp., Edgerton, Wis.  
PRESSURE—Buchanan Electrical Products Corp.  
PRES-TO-HEAT—Triton Mfg. Co., Inc.  
Prescolite Manufacturing Corp., 2229 Fourth St., Berkeley, California  
PRESIDENTIAL—Pittsburgh Reflecto Co.  
PRESSMASTER—Automatic Steam Products Corp.  
PRESSOVAC—Central Scientific Co.  
Pressteel Co.—see Prescolite Mfg. Corp.  
Pressure Can Corp., P. O. Box 107, Edgerton, Wis.  
PRESSURE PRINCESS—Campbell-Hausfeld Co.  
Pressure Products Corp.—see Prepo Corp.  
PRESSURE QUEEN—Campbell-Hausfeld Co.  
PRESSURETROL—Minneapolis-Honeywell Regulator Co.  
PREST-O-LITE—Lindie Air Products Co.  
PREST-O-MATIC—Clark Door Co., Inc.  
PRESTAL—Tal Bender, Inc.  
PRESTITE—Pelham Electric Mfg. Corp.  
Presto Electric Co., Inc., 600 Fulton St., Elizabeth, New Jersey  
Preway Inc., 1430 Second St., North, Wisconsin Rapids, Wis.  
Price Electric Corp., East Church & Second Sts., Frederick, Md.  
Primary Battery Div., Thomas A. Edison, Inc., Belmont Ave., Bloomfield, N. J.  
PRIME-TROL—Healy-Ruff Co., Water Level Controls Div.  
PRINCESS—Curtis Lighting, Inc.  
PRINCO—Precision Thermometer & Instrument Co.  
Printz Electric Co., 14581 Leasure St., Detroit 27, Mich.  
PRIVATE-LINE—Conn. Telephone & Electric Corp.  
PROBATOR—Montgomery Tool Co.  
PROBOTROL—Automatic Control Co.  
Producers and Distributors, Inc., 1321 Hanover Ave., Allentown, Pa.  
Product Tool & Star Bit Co., 1149 Railroad Ave., Rockford, Ill.  
PRODUCTMETER—Durant Manufacturing Co.  
Production Planning Co.—see Allen Cooler & Ventilator, Inc.  
Products Specialties Inc., 1016 N. Avenue E., Cranford, N. J.  
PROFILE—Lightolier, Inc.  
Progress Mfg. Co., Inc., Castor Ave. & Tulip St., Philadelphia 24, Pa.  
Progressive Machine Works, 1629 N. Front St., Reading, Pa.  
Progressive Welder Sales Co., 3070 East Outer Dr., Detroit 34, Michigan  
PROJECT-R-TABLE—Smith-Victor Corp.  
PROJECTORAMA—Century Lighting Inc.  
PROMAL—Link-Belt Co.  
PROMATIC—General Control Co.  
PROP-R-TEMP—Typhoon Air Conditioning Co., Inc.  
PROPELLAIR—Robbins & Myers, Inc.  
PROTECT-O-VANE—Minneapolis-Honeywell Regulator Co., Industrial Div.  
Protection Equipment Co., Inc., 2924 Emerson Ave. S. (P. O. Box 96 Lake St. Branch), Minneapolis 8, Minn.  
PROTECTO—Modern Industrial Products Co.  
PROTECTOGLD—Minneapolis-Honeywell Regulator Co.  
PROTECTOR—Chance Co., A. B.  
PROTECTORELAY—Minneapolis-Honeywell Regulator Co.  
PROTECTOSEAL—Phelps Dodge Copper Products Corp.  
PROTECTOSTAT—Minneapolis-Honeywell Regulator Co.  
Protectowire Co., P. O. Box 0, Hanover, Mass.  
PROTEX—Daniel Woodhead Co.  
Proto Tools, Box 3519 Terminal Annex, Los Angeles 54, Calif.  
PRY-LITE—Pyrrne & Commanv. Inc.  
Pyrrne & Co., Inc., 140 N. Towne Ave., Pomona, Calif.  
Pucel Enterprises, Inc., 3746 Kelley Ave., Cleveland 14, Ohio  
PULFUZZSWITCH—Adam Electric Co., Frank  
Pullman Vacuum Cleaner Corp., 33 Allerton St., Boston 19, Massachusetts  
PULSARC—Westinghouse Electric Corp.  
PULSESCOPE—Waterman Products Co., Inc.  
PULSOLITE—Electronic Control Corp.  
PULVERATOR—Given Mfg. Co.  
PUMPTROL—Square D Co.  
PUNCHY—Curtis Lighting, Inc.  
PUR-AIR-LITE—House-O-Lite Corp.  
PUR-O-TEX—Ton-Tex Corp.  
Pure Carbon Co., Inc., 441 Hall Ave., St. Marys, Pa.  
Pure Oil Co., 35 East Wacker Dr., Chicago 1, Illinois  
PUREFON—Pure Carbon Co., Inc.  
PURELURE—Pure Oil Co.  
PUREMET—Pure Carbon Co., Inc.  
Puritan Lighting Fixture Co., 21 Boerum St., Brooklyn 6, New York  
PUROCO—Pure Oil Co.  
PUROLENE—Pure Oil Co.  
PUROPALE—Pure Oil Co.  
PUSHMATIC—Bulldog Electric Products Co.  
Pyle-National Co., 1344 North Kostner Ave., Chicago 51, Illinois  
PYLE-O-FLEX—Pyle-National Co.  
PYLETS—Pyle-National Co.  
PYLON-LITES—Revere Electric Mfg. Co.  
PYR-O-VANE—Minneapolis-Honeywell Regulator Co., Industrial Div.  
PYRALITE—Gruber Lighting  
Pyramid Electric Co., 1445 Hudson Blvd., North Bergen, New Jersey  
Pyramid Instrument Corp., 630 Merrick Rd., Lynbrook, New York  
PYRANOL—General Electric Co., Apparatus Sales Div.  
PYRATHERM—Mercoid Corp.

Pyrene Manufacturing Co., 540 Belmont Ave., Newark 8, New Jersey  
PYREX—Corning Glass Works  
PYROCON—Illinois Testing Laboratories, Inc.  
Pyroferic Co., Inc., 216 St. & Bronx Blvd., N. Y. 67, N. Y.  
PYROLANCE—Illinois Testing Laboratories, Inc.  
PYROMASTER—Bristol Co.  
Pyrosil, Inc., 1889 Front St., Cuyahoga Falls, Ohio  
PYROSTAT—Minneapolis-Honeywell Regulator Co.  
PYROTITE—Westinghouse Electric Corp.  
PYROTROL—Bristol Company  
PYROTROL—Bailey Meter Co.  
PYROVENT—Bertram Co., Harvey P.  
PYROVISOR—Bristol Company

## Q

Q-BESTON—Auburn Mfg. Co.  
Q-FLOOR—Robertson Co., H. H.  
QIKLUG—Burndy Engineering Company, Inc.  
QUAD—Quadrangle Mfg. Co.  
Quadrangle Mfg. Co., 32 S. Peoria St., Chicago 7, Ill.  
QUAKER—Mor-Flo Heater Corp.  
QUAKER—Snyder & Son, Inc., M. L.  
Quaker City Electric Mfg. Co., 2810 East Pacific St., Philadelphia 34, Pennsylvania  
QUAKER-LITE—Quaker City Electric Mfg. Co.  
Quality Tools Corp., New Wilmington, Pennsylvania  
Queen-Gray Instrument Co.—see Gray Instrument Co.  
Queen Products Co., Inc., 13th & Rowan Sts., Louisville 3, Kentucky  
Queen Store Works, Inc., 505 Front St., Albert Lee, Minnesota  
QUELARC—Pyle-National Co.  
Quickfrez, Inc., P. O. Box 471, Fond du Lac, Wis.  
Quick Charge, Inc., 1750 N.E. 10 St., Oklahoma City 4, Okla.  
QUICK-CLEAN—Allis-Chalmers Manufacturing Co.  
QUICK-DRY—Scovill Manufacturing Co., Hamilton Beach Co. Div.  
QUICK-HEAT—Quick Charge, Inc.  
QUICK-HOT—Wen Products, Inc.  
QUICK-LITE—New York Fluorescent Mfg. Co.  
QUICK STEAM—Quick Charge, Inc.  
QUICK-WEDE—Kedman Co.  
QUICKLAG—Westinghouse Electric Corp.  
QUICKSTART—Marvel Lamp Co.  
QUICKSTART—New York Fluorescent Mfg. Co.  
QUICKWIRE—Cable Electric Products, Inc.  
QUIET—Kent Co., Inc.  
QUIET—Robbins & Myers, Inc., Fan Division  
Quiet-Heat Mfg. Corp., 46 Oliver St., Newark 5, N. J.  
QUIET-KOOL—Quiet-Heat Mfg. Corp.  
Quiet Kool Corp.—see Quiet-Heat Mfg. Corp.  
QUIETONE—Cornell-Dubilier Electric Corp.  
QULETTE—Arrow-Hart & Hegeman Electric Co.  
Quijada Tool Co., Inc.—see Quijada Tool Div., Gaines-Collins Co.  
Quijada Tool Div., Gaines-Collins Co., 5474 Alhambra Ave., Los Angeles 32, Calif.  
QUIK-LABEL—Brady Co. W. H.  
QUIK-LIFT—Coffing Hoist Div., Duff-Norton Co.  
QUIKHETER—Adam Electric Co., Frank  
QUIKLIT—Lewis-Shepard Products, Inc.  
Quincy Elevator Gate Co.—see Quincy Mfg. Co.  
Quincy Mfg. Co., Box 916, Tiffin, Ohio  
Quincy Stove Mfg. Co., 825 S. Front St., Quincy, Ill.  
QUINORGO—Johns-Manville  
QUINTERRA—Johns-Manville  
QWIK-CHANGE—Square D Co.

## R

R-ASE—All Steel Equipment Inc.  
RABC—Reynolds Metals Co.  
R & B—Robb & Blackmer  
RBC—Roller Bearing Company of America  
R-B-M Div., Essex Wire Corp., 131 Godfrey St., Logansport, Ind.  
R-C—Eitzen Co., Louis C.  
RCA—Radio Corp. of America  
RCD—Rotary Concrete Drill Co.  
RCP—Radio City Products Co., Inc.  
RCS Tool Sales Corp., 200 Moon Ave. (P. O. Box 1434), Joliet, Ill.  
R.E.C. Corp., Cedar & Spring Sts., New Rochelle, N. Y.  
R-K—Ruggles Klingemann Manufacturing Co.  
RLM Standards Institute, 326 W. Madison St., Chicago, Ill.  
R & M—Robbins & Myers, Inc.  
RWCO—Reinhardt-McArthur Co.  
R-P & C Valve Div., American Chain & Cable Co., Inc., Tulpehocken St. & Lebanon Valley R.R., Reading, Pa.  
RPM—Montgomery & Company, Inc.  
R. S.—Refrigerating Specialties Co.  
RSA—Anaconda Wire & Cable Co.  
RT & E Co., 1900 E. North St., Waukesha, Wis.  
RWP—Line Material Co.  
Rab Electric Mfg. Co., Inc., 605 E. 132 St., New York 54, N. Y.  
RABOLITES—Rab Electric Mfg. Co., Inc.  
Racine Electric Products—see Howard Industries Inc.  
RACO—All-Steel Equipment Inc.  
RADARANGE—Raytheon Manufacturing Co.  
RADAX—Electro-Voice Inc.  
RADECTOR—Jordan Electronics, Inc.  
RADELIN—United States Radium Corp.  
Rader Corp., 2076 Elston Ave., Chicago 14, Illinois  
RADI-AIRE—Reynolds Electric Co.  
RADIA—Shepler Manufacturing Co.  
RADIAMATIC—Minneapolis-Honeywell Regulator Co.  
Radiant Lamp Corp., 300 Pelliff Ave., Newark 8, New Jersey



# COMPANY AND TRADE NAME DIRECTORY

RADIATRIM—American Radiator & Standard Sanitary Corp.  
 RADIATSTAT—Ward Leonard Electric Co.  
 Radio City Products Co., Inc., Centre and Glendale Sts., Easton, Pa.  
 Radio Cores, Inc., 9540-50 Tulley Ave., Oak Lawn, Ill.  
 Radio Corp. of America, Engineering Products Div., Front & Cooper Sts., Camden 2, N. J.  
 Radio Frequency Laboratories Inc., Bounton, N. J.  
 Radio Receptor Co., Inc., 251 West 19 St., New York 11, New York  
 RADIOCARB—Driver Co., Wilbur B.  
 Radionic Transformer Co., 411 South Sangamon St., Chicago 7, Illinois  
 RADIX—Versen Company, Kurt  
 Radix Wire Co., 26260 Lakeland Blvd., Cleveland 32, Ohio  
 RADOR—Atlas Overhead Door Co.  
 RADOX—Barrett-Crump Co.  
 Rae Motor Corp., 2009 Kewaunee St., Racine, Wis.  
 RAINIER—American Crossarm & Conduit Co.  
 RAISED LAY—Union Plate & Wire Co., D. E. Makepeace Co. Div.  
 RAJAHGREY—Rogers Corp.  
 Rakit Corp.—see Ropes, I. J.  
 RAKSCOPE—Waterman Products Co., Inc.  
 RAM—Ambory Corp.  
 Rambusch Decorating Co., 40 W. 13 St., New York 11, N. Y.  
 Ramset Div., Olin Mathieson Chemical Corp., 12117 Bresa Rd., Cleveland 11, Ohio  
 Ramset Fasteners, Inc.—see Ramset Div., Olin Mathieson Chemical Corp.  
 RANCHER—Lau Blower Co.  
 RANCHO—Western Insulated Wire Co.  
 RANCHO—Westinghouse Electric Corp.  
 RANCHOPRENE—Versen Insulated Wire Co.  
 R-ANGE CONNECTORS—Frankel Connector Co.  
 R-ANGELUGS—Frankel Connector Co.  
 J-ANGER—Day-Brite Lighting, Inc.  
 Ranger Electric Mfg. Corp., 25-38 Astoria Blvd., Astoria, L. I., N. Y.  
 RANGESPLICES—Frankel Connector Co.  
 Rapid Electric Co., 2881 Middletown Rd., Bronx 61, N. Y.  
 Rapid Electroplating Process, Inc., 1414 South Wabash Ave., Chicago 5, Illinois  
 RAPIDAYTON—Dayton Pump & Manufacturing Co.  
 RAPIDUCTION—Oster Mfg. Co.  
 RAPIT-HEET—Eitzen Co., Louis C.  
 Rattan Mfg. Co., 10 Wall St., (P. O. Box 1745), New Haven 7, Conn.  
 RATOSIGHT—Fischer & Porter Co.  
 Rattray & Co., Inc., George, 116-08 Myrtle Ave., Richmond Hills 18, N. Y.  
 Rauland-Borg Corp., 3515 W. Addison St., Chicago 18, Ill.  
 RAWLOK—Rawlplug Co. Inc.  
 RAWLOK—Rawlplug Co. Inc.  
 Rawlplug Co., Inc., 271 Church St., N. Y. 13, N. Y.  
 Rawson Electrical Instrument Co., 124 Potter St., Cambridge 42, Mass.  
 RAY-LINE—Portable Light Co., Inc.  
 RAY-O-MATIC—Electric Cord Co.  
 Raybestos-Markham, Inc., 61 Willett St., Passaic, N. J.  
 RAYONIC—Waterman Products Co., Inc.  
 Raytheon Mfg. Co., 100 River St., Waltham 54, Mass.  
 RAYMASTER—Gates & Co., Inc., Geo. W.  
 RE-CIRK-IT—Heineman Electric Co.  
 RE-CORD-O-FONE—Bell Sound Systems, Inc.  
 REACH-IN—United Refrigerator Co.  
 REACTROL—General Electric Co., Apparatus Sales Div.  
 REACTRON—Ward Leonard Electric Co.  
 Reading Batteries, Inc., P. O. Box 916, Reading, Pa.  
 Reading Chain & Block Corp.—see Reading Crane & Hoist Corp.  
 Reading Crane & Hoist Corp., 2100 Adams St., Reading, Berks, Pennsylvania  
 Reading-Pratt & Cady Co., Inc.—see R-P & C Valve Div., American Chain & Cable Co., Inc.  
 Reading Steelcasting Co.—see R-P & C Valve Div., American Chain & Cable Co., Inc.  
 Reading Valve & Fittings Co.—see R-P & C Valve Div., American Chain & Cable Co., Inc.  
 Readrite Meter Works—see Triplett Electrical Instrument Co.  
 REAIRE—Versen Company, Kurt  
 REBAT—Reading Batteries, Inc.  
 RECAL—Versen Company, Kurt  
 RECAME—Versen Company, Kurt  
 RECIPROTOR—Trombetta Solenoid Corp.  
 RECO—Reynolds Electric Co.  
 Recora Company, 56 West 103 St., Chicago 28, Illinois  
 RECOSTAT—Regulator Equipment Corp.  
 RECTI-CHARGER—Raytheon Manufacturing Co.  
 RECTI-FILTER—Raytheon Manufacturing Co.  
 RECTIRINGER—Raytheon Mfg. Co.  
 RECTISEL—Electronic Devices, Inc.  
 RECTODYNE—McColpin-Christie Corp.  
 RECTOMATIC—Westinghouse Electric Corp.  
 RECTOX—Westinghouse Electric Corp.  
 RED ARROW—Sarnes Co., Inc., W. O.  
 RED ARROW—Lift Trucks, Inc.  
 RED BAND—Howell Electric Motors Co.  
 RED BAND—Maxon Premix Burner Co.  
 RED CAP—S & M Lamp Co.  
 RED "D"—Diamond Wire & Cable Co.  
 Red Devil Tools, 130 Colt St., Irvington 11, N. J.  
 RED END—Simonds Saw & Steel Co.  
 RED GIANT—Revolver Co.  
 RED HEAD—Blaco Mfg. Co.  
 RED HEAD—Prints Electric Co.  
 RED-LUX—Duro Test Corp.  
 RED RYDER—Industrial Products Co.  
 Red Seal Electric Co., 6321 Detroit Ave., Cleveland 2, Ohio

RED STREAK—National Super Service Co.  
 RED TANG—Simonds Saw & Steel Co.  
 RED TOP—H-B Instrument Co.  
 REDEGE—National Electric Products Corp.  
 REDFLASH—Amer. Radiator & Stand. Sanitary Corp.  
 Redi-Bolt, Inc., 5334 Indianapolis Blvd., East Chicago, Ind.  
 REDI-ROD—Redi-Bolt, Inc.  
 REDILIFT—Lewis-Shepard Products, Inc.  
 REDMOND—Cyclo-Frez Corp.  
 Redmond Company, Inc., Owosso, Michigan  
 REDOME—Versen Company, Kurt  
 REDTOP—Liebfried Mfg. Corp., C. H.  
 REDUCO—Versen Company, Kurt  
 Reed Mfg. Co., 1456 W. 8th St., Erie, Pa.  
 Reed-Unit-Fans, Inc., 1001 St. Charles Ave., New Orleans, La.  
 REEL-O-MATIC—Columbia Industries, Inc.  
 Reel-O-Matic Corp. of America—see Columbia Industries, Inc.  
 REELIFT—Hykon Mfg. Co.  
 REELITES—Appleton Electric Co.  
 REELOMATIC—Cordomatic Div., Vacuum Cleaner Corp. of America  
 Reeve Electrical Co., Inc., Subsidiary of Automatic Fire Alarm Co., 416 Broadway, N. Y. 13, N. Y.  
 Reeve Electronics, Inc., 609 W. Lake St., Chicago 6, Ill.  
 REEVELEC—Reeve Electronics, Inc.  
 Reeves Pulley Co., Inc., 1225 7th St., Columbus, Ind.  
 Refinery Supply Co.—see Central Scientific Co.  
 REFLECTO—Appleton Electric Co.  
 REFFEX—Versen Company, Kurt  
 REFRAC-TOL—Holograph Co., Inc.  
 Refrigerating Specialties Co., 3004 W. Lexington St., Chicago 11, Ill.  
 REGATRON—Electronic Measurements Co., Inc.  
 Regina Corp., 54 W. Cherry St., Rahway, N. J.  
 Rego Insulated Wire Co., 830 Monroe St., Hoboken, New Jersey  
 REGOHM—Electric Regulator Corp.  
 Regulator Equipment Corp., 56 California Ave., Paterson 3, N. J.  
 REGULEX—Allis-Chalmers Mfg. Co.  
 REGULITE—Ward Leonard Electric Co.  
 REGUTRON—Electric Machinery Mfg. Co.  
 Reichert Float & Manufacturing Co., 2238 Smead Ave., Toledo 6, Ohio  
 Reid Brothers Co., Inc., Post Machinery Co. Div., 140 Elliott St., Beverly, Mass.  
 Reimers Electric Appliance Co., Inc., Martinsburg Pike, Clearbrook, Virginia  
 Reiner Electronics Co., Inc., 152 W. 25 St., New York 1, N. Y.  
 Reinhardt-McArthur Co., 2247 Gravois Ave., St. Louis 4, Mo.  
 Reiter Corp., 1917 Henry Ave., S.W. (P. O. Box 478), Canton 1, Ohio  
 REJUST—Versen Company, Kurt  
 RELATROL—Automatic Temperature Control Co., Inc.  
 RELAY-AMP—Goldak Co.  
 RELENS—Versen Co., Kurt  
 RELIABLE—Standard Electric Co., Inc.  
 Reliable Battery Co.—see Standard Electric Co., Inc.  
 Reliable Electric Co., 3145 Carroll Ave., Chicago 12, Illinois  
 Reliable Mfg. Co.—see Century Product Works Inc.  
 RELIANCE—Chicago Belting Div., Chicago-Allis Mfg. Corp.  
 RELIANCE—Trine Manufacturing Corp.  
 RELIANCE—United States Steel, American Steel & Wire Div.  
 Reliance Automatic Lighting Co., 1927-29 Mead St., Racine, Wisconsin  
 Reliance Electric & Engineering Co., 1068 Ivanhoe Rd., Cleveland 10, Ohio  
 RELIATRON—Westinghouse Electric Corp.  
 RELIO—United States Rubber Co.  
 RELITE—Minneapolis-Honeywell Regulator Co.  
 RELOU—Versen Company, Kurt  
 RELUX—Versen Company, Kurt  
 REMINGTON—Cap Screw & Nut Co. of America, Inc.  
 Remington Corp., Remington Air Conditioning Div., Willey St., Auburn, N. Y.  
 Remington Arms Co., Inc., 939 Barnum Ave., Bridgeport 2, Connecticut  
 Remington Screw & Bolt Mfg. Co., Inc.—see Cap Screw & Nut Co. of America, Inc.  
 Remler Co., Ltd., 2101 Bryant St., San Francisco 10, Calif.  
 REMOTAIRE—Amer. Radiator & Stand. Sanitary Corp.  
 REMOTROL—Midwest Electric Products, Inc.  
 REMOTROL—Templeton Kenly & Co.  
 RENAISSANCE—Globe Lighting Products, Inc.  
 RENUZIT—Central Paint & Varnish Works Inc.  
 REPAR—Versen Co., Kurt  
 REPEATER—Kemlite Laboratories  
 REPLACEALL—Wage Mfg. Co.  
 REPS—Walton Co.  
 REPUBLIC—Steelduct Co.  
 Republic Flow Meters Co., 2240 Diversey Parkway, Chicago 47, Ill.  
 Republic Industries, Inc., Dor-O-Matic Div., 4446 N. Knox Ave., Chicago 30, Ill.  
 Republic Metals Co., 273 Green St., Brooklyn 22, N. Y.  
 Republic Steel Corp., Chain Div., Broadway & Chain-craft Rd., Cleveland 5, Ohio  
 Republic Steel Corp., Steel & Tubes Div., 224 East 131 St., Cleveland 8, Ohio  
 Republic Steel Corp., Truscon Steel Div., Albert St., Youngstown 1, Ohio  
 REPUBMET—Republic Metals Co.  
 RESEARCH—Graton & Knight Co.  
 Research-Cottrell, Inc., Bound Brook, N. J.  
 RESIMENE—Monsanto Chemical Co., Plastics Div.  
 RESINOX—Monsanto Chemical Co., Plastics Div.  
 RESISTEAT—Minneapolis-Honeywell Regulator Co.  
 Resistoflex Corp., 39 Plaisance St., Belleville 9, N. J.

RESISTOL—Collier Insulated Wire Co.  
 RESISTOY—G & W Electric Specialty Co.  
 RESOTRON—General Electric Co., X-Ray Department  
 RESPOT—Versen Company, Kurt  
 Respro Inc., 530 Wellington Ave., Cranston 10, Rhode Island  
 RESPROID—Respro, Inc.  
 RETEP—Hitemp Wires, Inc.  
 Reuland Electric Co., 3001 W. Mission Rd., Alhambra, Calif.  
 Revere Cooper & Brass Inc., 230 Park Ave., New York 17, New York  
 Revere Corp. of America, Wallingford, Conn.  
 Revere Electric Mfg. Co., 6017 Broadway, Chicago 40, Illinois  
 REVERSWITCH—Iron Fireman Manufacturing Co., Electronics Div.  
 Revolver Company, 86th St. at Tonelle Ave. Rts. 1 & 9, North Bergen, New Jersey  
 REVOLVO-RAY—Sireno Co., Inc.  
 REVUE—Versen Co., Kurt  
 REX—Chain Belt Company  
 REX—Shure Brothers, Inc.  
 REX—Titchener & Co., E. H.  
 REX-AIRATE—Cleveland Heater Co., Air Controls, Inc. Div.  
 Rex Electric Div., Cleveland Heater Co., 2310 Superior Ave., Cleveland 14, Ohio  
 Rex Electric Mfg. Corp., 221 N. Water St., Milwaukee 2, Wis.  
 REX M-2—Crucible Steel Co. of America  
 Rex Rheostat Co., 3 Foxhurst Rd., Baldwin, New York  
 REX-TUBE—Flexonics Corp.  
 Rex Welder & Engineering Co., 409 Southwest Blvd., Kansas City 8, Missouri  
 REXWELD—Crucible Steel Co. of America  
 REXSELEN—Electrical Facilities, Inc.  
 Reynolds Electric Co., 3003 River Rd., River Grove, Ill.  
 Reynolds Metals Company, 2500 South Third St., Louisville 1, Kentucky  
 REZISTAL—Crucible Steel Co. of America  
 REZISTOR—Thompson Son Co., Henry G.  
 RHINO—Bridgeport Hardware Mfg. Corp.  
 RHINOBESTOS—Westinghouse Electric Corp.  
 Rhoads & Sons, J. E., 35 North Sixth St., Philadelphia 6, Pennsylvania  
 Rhode Island Insulated Wire Co., Inc., 50 Burnham Ave., Cranston, Rhode Island  
 RIBIFLEX—Ward Leonard Electric Co.  
 RIBOHM—Ward Leonard Electric Co.  
 Rich Fan Manufacturing Co., Inc., Phil, 2900 Caroline St., P. O. Box 8036, Houston 4, Texas  
 Richards Co., Inc., Arklay St., 9 Winchester St., Newton Highlands 61, Mass.  
 Richards Company, J. R., P. O. Box 482, Carnegie, Pennsylvania  
 Richards Mfg. Co. Ltd., 25 Rankin St., Newark 3, New Jersey  
 Richards-Wilcox Mfg. Co., 150 Third St., Aurora, Ill.  
 Richardson-Allen Corp., 116-15 15th Ave., College Point, New York  
 Richardson Scale Co., Clifton, N. J.  
 Richlyn Company—see Associated Stove Manufacturers  
 RID-ALL—Estellite Co., Inc.  
 Ridge Tool Co., 400 Clark St., Elyria, Ohio  
 RIGID—Ridge Tool Co.  
 Rieber, Inc. Frank—see Caltron Products Co.  
 RING CALL—Edwards Co., Inc.  
 RIFPLEX—Continental Copper & Steel Indus., Inc., Hatfield Wire & Cable Div.  
 Ripley Co., Inc., Factory St., Middletown, Conn.  
 RITEOHM—Ohmite Manufacturing Co.  
 Rittenhouse Company, Inc., East St., Honeoye Falls, New York  
 RITZ—Marium Mfg. Co., Inc.  
 River Smelting & Refining Co., 4195 Bradley Rd. (P. O. Box 5755), Cleveland 1, Ohio  
 Riverside Mfg. & Electrical Supply Co., 10228 Michigan Ave., Dearborn, Mich.  
 RIVIERA—Westinghouse Electric Corp., Electric Appliance Div.  
 RO BARN—Rome Cable Corp.  
 RO-FLO—Allis-Chalmers Manufacturing Co.  
 RO LOW—Rome Cable Corp.  
 RO SEAL—Rome Cable Corp.  
 Ro-Son Inc., 98 N. 7th St., Brooklyn 11, N. Y.  
 RO-TWIN—Allis-Chalmers Manufacturing Co.  
 Roanwell Corp., 662 Pacific St., Brooklyn 17, New York  
 ROAST-O-PLATE—Meynell Manufacturing Co.  
 ROBARN—Rome Cable Corp.  
 Robb & Blackmer, 129 Pearl St., Boston 10, Mass.  
 Robbins & Myers, Inc., 1345 Lagoda Ave., Springfield, Ohio  
 Robbins & Myers, Inc., Fan Division, 387 South Front St., Memphis 2, Tennessee  
 Robertson Co., L. N., 1539 E. 103 St., Seattle 5, Wash.  
 Roberts Toledo Rubber Co., 1200 Prospect, Toledo 6, Ohio  
 Robertshaw-Fulton Controls Co., Fielden Instrument Div., 2920 N. Fourth St., Rockford, Ill.  
 Robertshaw-Fulton Controls Co., Fulton Siphon Div., Box 400, Knoxville, Tenn.  
 Robertson Co., H. H., 2400 Farmers Bank Bldg., Pittsburgh 22, Pennsylvania  
 Robertson and Ruth, Box 534, Elmhurst, Ill.  
 Robinson Aviation, Inc., Teterboro, N. J.  
 Robinson Ventilating Co., Zelenople, Pa.  
 ROBOT—Miller Harris Instrument Co.  
 Robot Appliances, Inc., 7041 Orchard St., Dearborn, Mich.  
 ROBOTROL—Reliance Automatic Lighting Co.  
 ROBOTRON—Emmett Machine & Mfg. Inc.  
 Roche Co., Inc., 11 Park Pl., N. Y. 7, N. Y.  
 ROCK BRAND—Weiss & Biheller Merchandise Corp.  
 ROCK ISLAND—Birman Electric Co.

Rockbestos Products Corp., Nicoll & Canner Sts., New Haven 4, Connecticut  
 ROCKET—Barnes Co., Inc., W. O.  
 Rockford Bolt & Steel Co., 126 Mill St., Rockford, Ill.  
 Rockford Wire Stripper Co., 2323 23rd Ave., Rockford, Ill.  
 ROCKING CONTACT—Allis-Chalmers Mfg. Co.  
 RODAR—Driver Co., Wilbur B.  
 Rodale Manufacturing Co., Inc., Sixth & Minor Sts., Emmaus, Pennsylvania  
 Roddick Tool Co., 1023 N. Pauline (P. O. Box 109), Anaheim, Calif.  
 Roe & Sons, Inc., Justus, 1 Roe Court, Patchogue, N. Y.  
 Roebeling's Sons Corp., John A., Subsidiary of Colorado Fuel and Iron Corp., 640 S. Broad St., Trenton 2, N. J.  
 ROEBX—Roebeling's Sons Corp.  
 ROELAD—Roebeling's Sons Corp.  
 ROECORD—Roebeling's Sons Corp.  
 ROECOZONE—Roebeling's Sons Corp.  
 ROGLAS—Roebeling's Sons Corp., John A.  
 ROELASTIC—Roebeling's Sons Corp., John A.  
 ROEPRENE—Roebeling's Sons Corp.  
 ROESHEATH—Roebeling's Sons Corp.  
 ROETEMP—Roebeling's Sons Corp., John A.  
 ROEVAR—Roebeling's Sons Corp., John A.  
 ROEWELD—Roebeling's Sons Corp.  
 ROFLUX—Rome Cable Corp.  
 Rogers Corp., Rogers, Conn.  
 Rogers Electric Laboratories, Inc., 1745 Doan Ave., East Cleveland 12, Ohio  
 Rogers Industries Inc.—see Rogers Industries Inc.  
 Rogers Industries Inc., 43-49 Bleecker St., New York 12, N. Y.  
 Rogers Paper Co.—see Rogers Corp.  
 ROKON—Eitzen Co., Louis C.  
 Rol-Away Truck Co.—see Rol-Away Truck Mfg. Co., Inc.  
 Rol-Away Truck Mfg. Co., Inc., 6143 S.E. Foster Rd., Portland 6, Ore.  
 ROL-TOE—Templeton, Kenly & Co.  
 ROL-TOP—Kinsell Mfg. Co.  
 ROLA-FLEX—Shippert Mfg. Co.  
 ROLARC—Federal Electric Products Co.  
 ROLENE—Rome Cable Corp.  
 Rol-A-Reel Co., 1100 Sycamore St., Cincinnati 2, Ohio  
 Roller Inc., Wm. G., 159 Liberty Ave., Mineola, N. Y.  
 Roller Bearing Company of America, Sullivan Way, West Trenton, New Jersey  
 Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa.  
 ROLLING-GRIP—Dodge Mfg. Corp.  
 ROLLO-COLOR—Luxor Lighting Products, Inc.  
 ROLLWAY—Pioneer Pump Div., Detroit Harvester Co.  
 Rollway Bearing Company, Inc., 541 Seymour St., Syracuse 4, New York  
 ROLOTAC—Ewell-Parker Electric Co.  
 ROMARINE—Rome Cable Corp.  
 Rome Cable Corp., Ridge St., Rome, New York  
 ROME-EMT—Rome Cable Corp.  
 ROME-RIGID—Rome Cable Corp.  
 ROMEX—General Cable Corp.  
 ROMEX-N—General Cable Corp.  
 RONEON—Rome Cable Corp.  
 ROOFMASTER—Carpenter Mfg. Co.  
 Root-Lowell Corp., 445 N. Lake Shore Drive, Chicago, Ill.  
 Roots-Connorsville Blower, 900 W. Mount St., Connorsville, Ind.  
 ROPRENE—Rome Cable Corp.  
 Rose & Company, Inc., J., 68 Jay St., Brooklyn 1, New York  
 ROSIN X—Dunton Co., M. W.  
 Ross Operating Valve Co., 120 E. Golden Gate Ave., Detroit 3, Mich.  
 Rostan Corporation, 5660 59th St., Maspeth 78, New York  
 ROTA-FLOW—Rotary Lift Co.  
 ROTA-GEAR—Rotary Lift Co.  
 ROTAMETER—Koenemann Co., R. A.  
 Rotary Concrete Drill Co., 650 S. Arroyo Parkway, Pasadena 1, Calif.  
 Rotary Lift Co., 1054 Kansas St., Memphis 2, Tennessee  
 ROTASWING—Pelham Electric Mfg. Corp.  
 ROTISS-A-RANGE—Odin Stove Manufacturing Co.  
 Roto Broil Corp. of America—see Jay Broiler Co.  
 ROTO-CONE—Gerbing Mfg. Corp.  
 ROTO-PAINT—Stow Mfg. Co.  
 ROTO RANGER—Simpson Electric Co.  
 ROTO-STACKER—CraneVeyor Corp.  
 ROTO STRIP—Neo-Ray Products Inc.  
 ROTO-TEST—Meter Devices Co.  
 ROTO-TROL—Healy-Ruff Co., Water Level Controls Div.  
 ROTO-TROWEL—Stow Mfg. Co.  
 ROTOBELM—General Lighting Co.  
 ROTOBIDGE—Communication Measurements Lab., Inc.  
 ROTOCURE—Boston Woven Hose & Rubber Co.  
 ROTOFORMER—Westinghouse Electric Corp.  
 ROTOLECTOR—Klied Bros. Universal Electric Stage Lighting Co., Inc.  
 ROTOSPOT—Rambusch Decorating Co.  
 ROTOTROL—Westinghouse Electric Corp.  
 ROTRTWIST—Star Expansion Bolt Co.  
 Round Bridgeport Chain & Mfg. Co.—see Republic Steel Corp.  
 Round & Son Inc., David, Box 883, Cleveland 22, Ohio  
 ROUND-WOUND—Line Material Co.  
 Router Mfg. Co., Inc.—see Casey Mfg. Co., Inc.  
 Rowan Controller Co., 2313-15 Homewood Ave., Baltimore 18, Maryland  
 Rowco Mfg. Co., Inc.—see Brushmaster Saw, Inc.  
 ROYAL—United States Rubber Co.  
 ROYAL—Waveland Electric Co.  
 ROYAL-AIRE—Union Asbestos & Rubber Co.  
 Royal Electric Company, Inc., 95 Grand Ave., Pawtucket, Rhode Island

Royal Electric Mfg. Co., 1122 E. 87 St., Chicago 19, Ill.  
 ROYAL GOLD—U. S. Rubber Co.  
 ROYAL-LAG—Royal Electric Co., Inc.  
 ROYAL-NOARK—Royal Electric Company, Inc.  
 Royal Switchboard Co., Inc., 460 Driggs Ave., Brooklyn 11, New York  
 ROYALASTIC—United States Rubber Co.  
 ROYALGREY—Rogers Corp.  
 Royaline Preferred Lighting Corp., 862 Newark Ave., Jersey City 6, N. J.  
 ROZONE—Rome Cable Corp.  
 RUBBER-COAT—Wilbur & Williams Co.  
 Rubber Glove Co. of America—see Miller Products Co., Inc.  
 RUBPROTEX—Bisonite Co., Inc.  
 RUBRES—Co-operative Utilities Co. Inc.  
 RUBRITE—Co-operative Utilities Co. Inc.  
 Ruby Chemical Co., 68-70 McDowell St. (P. O. Box 62), Columbus 16, Ohio  
 Ruby-Phillips Corp., 32-02 Queens Blvd., Long Island City 1, N. Y.  
 RUBYFLUID—Ruby Chemical Co.  
 RUCCO—Ruby Chemical Co.  
 Ruggles Klingemann Manufacturing Co., Foster Court, P. O. Box 550, Salem, Massachusetts  
 RUNABOUT—Barber-Greene Co.  
 Runzel Cord & Wire Co., 4723-31 West Montrose Ave., Chicago 41, Illinois  
 RUPTAIR—Allis-Chalmers Manufacturing Co.  
 RUPTOR—Allis-Chalmers Manufacturing Co.  
 Rural Transformer & Equipment Co.—see R T & E Co.  
 RURALAY—General Cable Corp.  
 RURALFORMER—R T & E Co.  
 RURALITE—Fitz Water Wheel Co.  
 RUREX—United States Rubber Co.  
 Rusgreen Mfg. Co., 14262 Birwood Ave., Detroit 38, Mich.  
 RUSH—Eraser Company, Inc.  
 Rush Wire Stripper Div., Eraser Co., Inc., 1068 S. Clinton St., Syracuse 4, N. Y.  
 Russell Mfg. Co., Inc., R. V., 814 Bath Ave., Niagara Falls, N. Y.  
 Russell & Stoll Co., Inc., 125 Barclay St., N. Y. 7, N. Y.  
 RUST-SHIELD—Wilbur & Williams Co.  
 RUSTCLITE—Gruber Lighting  
 RUSTOP—Electro Rust-Proofing Corp.  
 Ryan Industries, Inc.—see Ryan Refrigeration Co.  
 Ryan Refrigeration Co., 1025 E. Excelsior Blvd., Hopkins, Minn.  
 Ryther Purdy Lumber Co., 501 Tiffany St., N. Y. 59, N. Y.

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S & C Electric Company, 4435 Ravenswood Ave., Chicago 40, Illinois  
 SCP—Superior Carbon Products Co.  
 S-E—Standard Electronic Corp.  
 SES—Springfield Electrical Specialties, Inc.  
 SFO—Split Ballbearing Corp.  
 SI—Superior Insulating Tape Co.  
 S.I.E. Co.—see Sherman Industrial Electronics Co.  
 S K F Industries, Inc., Front St. & Erie Ave., Philadelphia 32, Pennsylvania  
 SKJ Electrical Products Mfg. Co.—see Jay Broiler Co.  
 S-M—Starrett Co., L. S.  
 S&M Lamp Co., 119 W. 36 Pl., Los Angeles 7, Calif.  
 SMC—St. Mary's Carbon Co.  
 SNC Manufacturing Co., Inc., P. O. Box 277, Oshkosh, Wisconsin  
 SNS—Special Products Co.  
 SPCD—Superior Porcelain Co.  
 SRB—Marlin Rockwell Corp.  
 SS UNIT—Allis-Chalmers Manufacturing Co.  
 S.T.R.—Jeffrey Mfg. Co.  
 SACO—Stephens-Adams Mfg. Co.  
 SADI—Belgian Electric Sales Corp.  
 SAF-T-AIR—United Electric Motor Co.  
 SAF-T-LAG—Jefferson Electric Co.  
 SAF-T-RAY—Westinghouse Electric Corp., Elevator Div.  
 SAF-T-SAW—Spartan Saw Works, Inc.  
 SAF-T-TRED—Interstate Rubber Products Corp.  
 Safa Alarm Div., Fyr-Fyter Co., 243 W. Market St., Orrville, Ohio  
 SAFE-FLEX—Starrett Co., L. S.  
 SAFE-HED—Mathews & Co., James H.  
 SAFE-R-WIPE—Redmond Co., Inc.  
 SAFE-T-AIRE—Hanovia Chemical & Mfg. Co.  
 SAFE-T-CHEK—Detex Watchclock Corp.  
 SAFE-T-CLIP—Industrial Devices, Inc.  
 SAFE-T-KOOL—Active Specialty Corp.  
 Safe-T-Seal Div., Chemagnetic Corp., 132 W. Verdugo Ave., Burbank, Calif.  
 SAFE-T-TAP—Keystone Mfg. Co.  
 SAFE-TEMP—Westinghouse Electric Corp.  
 SAFE WAY—Safety Live Line Tool Co.  
 SAFE-WEIGHT—Louisville Ladder Co.  
 SAFECOTE—National Electric Products Corp.  
 SAFECOTE—Roebeling's Sons Corp., John A.  
 SAFETECH—Capewell Mfg. Co.  
 SAFETY-CIRCLE—Allis-Chalmers Manufacturing Co.  
 Safety Co., Inc.—see Safety Car Heating and Lighting Co., Inc.  
 Safety Belt-Lacer Co.—see Armstrong-Bray & Co.  
 Safety-Car Heating and Lighting Co., Inc., P. O. Box 904, New Haven 4, Conn.  
 Safety Live Line Tool Co., 973 86th Ave., Oakland 21, Calif.  
 SAFETY M.I.—General Cable Corp.  
 SAFETY PULL—Coffing Hoist Div., Duff-Norton Co.  
 SAFEWAY—Safety Live Line Tool Co.  
 SAFEWAY—Woodhead Co., Daniel  
 Safeway Heat Elements, Inc., Newfield St. (P. O. Box 1109), Middletown, Connecticut  
 SAFLEX—Benjamin Electric Mfg. Co.  
 SAFLEX—Square D Company  
 SAFPATCH—Klied Bros. Universal Electric Stage-Lighting Co., Inc.

SAFREEN—Duro-Test Corp.  
 SAFRONT—Square D Company  
 SAFTEST—Fileron & Son, M. M.  
 Safway Steel Products, Inc., 6234 W. State St., Milwaukee 13, Wis.  
 SAGINAW—Ironbound Operating Co.  
 St. John Engineering Co., 4131 Lankershim Blvd., North Hollywood, Calif.  
 St. Louis Brass Co.—see Guth Co., Edwin F.  
 St. Louis Electric Works—see Valley Electric Corp.  
 St. Louis Malleable Casting Co., 7701 N. Conduit Ave., St. Louis 15, Mo.  
 St. Louis Screw & Bolt Co., 6900 North Broadway, St. Louis 15, Missouri  
 St. Marys Carbon Co., State St., St. Marys, Pa.  
 St. Paul Hydraulic Hoist—see Gar Wood Industries, Inc.  
 St. Regis Paper Co., Panelyte Division, 230 Park Ave., New York 17, New York  
 SAL BRICK—American Solder & Flux Co.  
 SALDMASTER—Burpee Can Sealer Co.  
 Salem Mfg. Corp.—see Atlas Screw & Specialty Co.  
 Salem Tool Co., 767 S. Ellsworth Ave., Salem, Ohio  
 SALL—Adealt Mfg. Co.  
 Salisbury & Co., W. H., 401 N. Morgan St., Chicago 22, Ill.  
 Salton Manufacturing Co., Inc., 29 Jumel Place, New York 32, New York  
 SAMSON—Couch Company, Inc., S. H.  
 SAMSON—Metalcraft Products Co., Inc.  
 Sanborn Co., 195 Massachusetts Ave., Cambridge, Mass.  
 SAND-ALL—Woodward Machine Co.  
 SAND BRUTE—Nedco Company  
 SAND-SCOTT—Holub Industries, Inc.  
 SANDERPLANE—American Floor Surfacing Machine Co.  
 SANDMASTER—Atlas Floor Surfacing Machinery Corp.  
 Sangamo Electric Company, 11th & Converse, Springfield, Illinois  
 SANITAIR—Sanitron, Inc.  
 Sanitarium & Hospital Equipment Co.—see Battle Creek Equipment Co.  
 Sanitary Refrigerator Co.—see Quicrefr, Inc.  
 Sanitron, Inc., 24-10 40th Ave., Long Island City 1, New York  
 SANIVENT—Air-Tron, Inc.  
 Santa Fe Tank & Tower Co., 5401 S. Boyle Ave., Los Angeles 58, Calif.  
 Sassen Derrick Co., 3101 Grand Ave., Chicago 111.  
 SATURN—Barton Products, Inc.  
 Sauerstein Cement Company, 1045 North Canal St., Pittsburgh 15, Pennsylvania  
 Sausee & Co., M. W., 636 N. Robertson Blvd., Los Angeles 46, Calif.  
 SAV-A-LIFE—Products Specialties, Inc.  
 SAW GUN—Mid-States Welder Mfg. Co.  
 SAWZALL—Milwaukee Electric Tool Corp.  
 Saxenburg Ceramics, P. O. Box 170, Saxenburg, Pa.  
 Saylor Electric Products Corp., 277 Pierce St., Birmingham, Mich.  
 SAYLORDUCT—Saylor Electric Products Corp.  
 Scam Instrument Corp., 3909 Irving Park Rd., Chicago 18, Ill.  
 Schaff Inc., J. H., 36 Main St., Orange, New Jersey  
 Schauer Machine Co.—see Schauer Mfg. Corp.  
 Schauer Mfg. Corp., 4500 Alpine Ave., Rossomay, Ohio  
 Scheiner Metal Products—see Atlas Screw & Specialty Co.  
 Scherr Co., Inc., George, 200 Lafayette St., N. Y. 12, N. Y.  
 Scherr Optical Tools Inc., George—see Scherr Co., Inc., George  
 SCHOOLMASTER—Benjamin Electric Mfg. Co.  
 SCHOOLMASTER—Great Northern Manufacturing Corp.  
 Schweitzer & Conrad, Inc.—see S & C Electric Co.  
 Schwitzer-Cummins Co., 1125 Massachusetts Ave., Indianapolis 7, Indiana  
 SCI-TRON—Venus Products Co.  
 Sciaky Bros., Inc., 4915 West 67 St., Chicago 38, Illinois  
 SCINTAGUN—Goldak Co.  
 SCOOT-CRETE—Getman Brothers, Manufacturing Div.  
 SCOOT-LITE—Woodward Machine Co.  
 SCOTCH—Minnesota Mining & Manufacturing Co.  
 SCOTCHCAST—Minnesota Mining and Mfg. Co.  
 SCOTCHFIL—Minnesota Mining and Mfg. Co.  
 SCOTCHLOK—Minnesota Mining & Manufacturing Co.  
 SCOTCH-MUND—Mund Boilers, Inc.  
 Scott, Inc., Hermon Hosmer, 385 Putnam Ave., Cambridge 39, Massachusetts  
 SCOTTIE—Fulton Mfg. Corp.  
 Scovill Manufacturing Co., Hamilton Beach Co. Div., Racine, Wisconsin  
 Scranton Battery Corp., 300 Delaware St., Archbald, Pa.  
 SCREEN-ETCH—McKay Chemical Co., Inc.  
 SCREW-IN—Arch Mfg. Co.  
 SCRUI-ITS—Solar Electric Corp.  
 SCRUI-TITE—Mastercraft Plastics Co., Inc.  
 SCRUGUN—Black & Decker Mfg. Co.  
 SCRUIIN—Star Expansion Bolt Co.  
 SCRULUG—Burndy Engineering Company, Inc.  
 SCULPTONE—Lightolier, Inc.  
 SEA BREEZE—Chelsea Fan and Blower Co.  
 Seaboard Electric Co., 417 Canal St., New York 13, N. Y.  
 Seabreeze Engineering Co., Inc., 8500 East Garvey Ave., P. O. Box 8, South San Gabriel, California  
 Seager-Carbon Co.—see Seager Standard Carbon Co.  
 Seager Standard Carbon Co., 291 Church St., N. Y. 13, N. Y.  
 SEAL-CLAD—Allis-Chalmers Manufacturing Co.  
 SEAL VENT—Cornell-Dubilier Electric Corp.  
 SEALED-FLO—Benjamin Electric Mfg. Co.  
 SEALED TIGHT—Royal Electric Co., Inc.  
 SEALMASTER—Stephens-Adams Mfg. Co.  
 SEALNUT—Radio Frequency Laboratories, Inc.

# COMPANY AND TRADE NAME DIRECTORY

SEAPLANE—Friedrich Refrigerators, Inc.  
SEALSTIX—Central Scientific Co.  
SEALTITE—American Brass Co.  
Searer Development & Mfg. Corp.—see Basic Products Corp.  
SEARIGHT—Bartlett Mfg. Co.  
SECONEC—Rusgreen Mfg. Co.  
SECURITY—United States Rubber Co.  
Security Insert Co., 1300 Arch St., Phila. 7, Pa.  
Security Lightning Rod Company—see Security Mfg. & Contracting Co.  
Security Mfg. & Contracting Co., 606-612 Pine St., Burlington, Wis.  
SECURITYFLEX—Amaco Wire & Cable Co.  
SECO—Southern Electrical Equipment Co.  
SEELUX—Guth Company, Edwin F.  
Seely Instrument Co., Inc., 377 Fourth St., P. O. Box 381, Niagara Falls, N. Y.  
SEEWEL—Weldon Mfg. Co.  
Seigel Co., L. J., 2500 West North Ave., Chicago 47, Illinois  
SELCO—Sell Electric Co., H. H.  
SELCO—Spies Electric Works  
SELECT-A-CALL—Natl. Inter-Communication Systems, Inc.  
SELECT-A-SPEDE—Allis Co., Louis  
SELECT-O-SPEED—Lowjoy Flexible Coupling Co.  
SELECTOMATIC—Westinghouse Electric Corp.  
SELECTROL—Automatic Control Co.  
SELENIFIER—American Rectifier Corp.  
Selenium Corporation of America—see Vickers, Inc., Vickers Electric Div.  
SELETRON—Radio Receptor Co., Inc.  
Self-Lifting Piano Truck Co., 423 North Main St., Findlay, Ohio  
Self-Winding Clock Co., Inc., 205-211 Willoughby Ave., Brooklyn 5, New York  
SELFUBE—Keystone Carbon Co.  
Sell Electric Co., H. H., 3240 Dakota Ave., Minneapolis 16, Minn.  
Sell Electrical Mfg. Co., H. H.—see Sell Electric Co., H. H.  
SERP—Self-Lifting Piano Truck Co.  
SEMOTOR—Trombetta Solenoid Corp.  
Sensation Mower, Inc., 7577 Burlington St., Ralston 1, Nebraska  
Sensitive Research Instrument Corp., 9 Elm Ave., Mount Vernon, N. Y.  
SENTINEL—Cincinnati Time Recorder Co.  
SENTINEL—Johnson-Williams, Ltd.  
SENTINEL—Photobell Company  
SENTINEL—Portable Light Co., Inc.  
SENTINEL—Westinghouse Electric Corp.  
SENTRY—Industrial Starter Corp.  
SENTRY—Verd-A-Ray Corp.  
Sentry-Lite Div., Hobby & Brown Electronics Corp., 55 Front St., Rockville Centre, N. Y.  
SENTRY STARTER—Verd-A-Ray Corp.  
SEPCO—Steel Electric Products Co., Inc.  
Sepco Corp., 860 Cross St., Pottstown, Pennsylvania  
SEPARABLE—Appleton Electric Co.  
SEQUENSTAR—Sola Electric Co.  
SEQUETROL—Emmett Machine & Mfg., Inc.  
Sequoia Process Corp., 871 Willow St., P. O. Box 1007, Redwood City, Calif.  
SERCON—Superior Fuse & Mfg. Co., Inc.  
SERVATRON—Raytheon Manufacturing Corp.  
SERVE-A-UNIT—Alden Products Co.  
Sernel, Inc., 119 N. Morton Ave., Evansville 30, Ind.  
SERVICE—Barnes Co., Inc., W. O.  
SERVICE—Boston Woven Hose & Rubber Co.  
SERVICE BUGS—Frankel Connector Co.  
Service Caster & Truck Corp., Albion, Mich.  
SERVICE-MASTER—McCabe-Powers Auto Body Co.  
Service Recorder Co., 1375 Euclid Ave., Cleveland 15, Ohio  
SERVICEMAN—Marsh Corp., Jas. P.  
SERVIS—Service Recorder Co.  
SERVISAFE—Thompson Electric Co.  
SERVISHP—Radio City Products Co., Inc.  
SERVISLEE—Hubbard & Co.  
SERVIT—Burndy Engineering Company, Inc.  
SEVERN—Amer. Radiator & Stand. Sanitary Corp.  
SEWALL—Hewitt-Robins  
SEWER MASTER—Oster Mfg. Co.  
Seyler Manufacturing Co., P. O. Box 9564, Pittsburgh 23, Pennsylvania  
SHAFFER CONCAVE—Chain Belt Co.  
SHAFT-KING—American Pulley Co.  
Shakeproof Div., Illinois Tool Works, St. Charles Rd., Elgin, Ill.  
Shalds Mfg. Co., Inc., 156 W. Providencia Ave., Burbank, Calif.  
Shallcross Controls, Inc., 2217-21 N. 31 St., Milwaukee 8, Wis.  
Shallcross Mfg. Co., 33 Lincoln Ave., Collingdale, Pa.  
Shaw-Box Crane & Hoist Div., Manning, Maxwell & Moore, Inc., Muskegon, Mich.  
Shaw Insulator Co., 160 Colt St., Irvington 11, N. J.  
SHAWMUT—Chas. Shawmut Co.  
SHEETFLEXOS—Kearney & Mattison Co.  
Shelby Electric, Inc., 636 South Noble St., Shelbyville, Indiana  
Sheller Manufacturing Corp., Dryden Rubber Div., 1014 South Kildare Ave., Chicago 24, Illinois  
SHELLTONE—Central Paint & Varnish Works, Inc.  
Shelton Plane & Tool Mfg. Co., 1-19 Maple St., Shelton, Connecticut  
Shenango-Penn Mold Co., West Third St., Dover, Ohio  
Shepard Niles Crane & Hoist Corp., Schuyler Ave., Montour Falls, N. Y.  
Shepler Manufacturing Co., 1229-43 Goebel St., Pittsburgh 33, Pennsylvania  
Sheppard Co., Inc., R. H., 101 Philadelphia St., Harover, Pa.  
SHERARDUCT—National Electric Products Corp.  
Sherman and Co.—see American Silver Co., Inc., Industrial Div.  
Sherman Industrial Electronics Co., 505 Washington Ave., Belleville, New Jersey

Sherman Mfg. Co., H. B., 22 Barney, Battle Creek, Michigan  
Sherman & Reilly, Inc., 1 Broad St., Chattanooga 2, Tenn.  
Sherwin-Williams Co., 101 Prospect Ave., N. W., Cleveland 1, Ohio  
SHIELD-ARC—Lincoln Electric Co.  
Shippert Mfg. Co., 414 E. M. St., Galena Ave., Dixon, Ill.  
SHOCK-PAK—Duro-Test Corp.  
SHOCKGARD—Mine Safety Appliances Co.  
SHOK-A-SORB—Royal Electric Company, Inc.  
SHOK-FERRE—International Electric Fence Co., Inc.  
SHOK-PRUF—Cable Electric Products, Inc.  
SHOKLESS—Kneisley Electric Co.  
SHOP KING—Precision Welder Mfg. Co.  
SHOPLIFTER—Economy Engineering Company  
SHOPMATE—Portable Electric Tools, Inc.  
SHORTY—Duff-Norton Co.  
SHOT-PEENED—Link-Belt Co.  
Shox-Stok, Inc., 1000 M. St., Wellington, Ohio  
Shrader Co., F. W., 5788 West Washington Blvd., Culver City, California  
Shreveport Engineering Co.—see Bar-Brook Mfg. Co., Inc.  
SHUR-FLO—Hays Mfg. Co.  
SHUR-SHOX—Shox-Stok, Inc.  
SHUR-MOUNT—Swivelco Co., Inc.  
Shure Brothers, Inc., 225 West Huron St., Chicago 10, Illinois  
SHURLOK—Pass & Seymour, Inc.  
Sibley Mfg. Co., Inc., Edw. L., 222 West Main St., Bennington, Vermont  
SIDALARM—New Jersey Fire Alarm Co., Inc.  
Siebling Mfg. Co., George, Iowa  
SIECO—Sherman Industrial Electronics Co.  
Sieglar Corp., Wilson Ave., Centralia, Ill.  
Sieglar Enamel Range Co.—see Sieglar Corp.  
Sieglar Heater Corp.—see Sieglar Corp.  
Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif.  
Sierra Electric & Mfg. Co.—see Sierra Electric Corp.  
SIERRA-LITE—Sierra Electric Corp.  
SIERRAWARE—Sierra Electric Corp.  
SIGHT SAVER—Laurel Lamp Manufacturing Co., Inc.  
SIGHT SAVER—Silvray Lighting, Inc.  
SIGHTLITE—Associated Lighting Service  
SIGHTMASTER—Flexo International Corp.  
SIGHTRON—Lightolier, Inc.  
SIGHTSAVER—Manning Co., R. A.  
SIGMA-PLEX—Wheeler Electric Co.  
Signal Electric Mfg. Co., Menominee, Mich.  
Signal Engineering & Mfg. Co., Branchport Ave., Long Branch, N. J.  
Signal Flare Div., Standard Railway Fuse Corp., P. O. Box 30, Needham Heights 94, Mass.  
SIL-BOND—United Wire & Supply Corp.  
SIL-FLUX—United Wire & Supply Corp.  
SIL-STIK—Sun Chemical Corp., Electro-Technical Products Div.  
SIL-THIN-BESTOS—Sun Chemical Corp., Electro-Technical Products Div.  
SIL-THIN-GLASS—Sun Chemical Corp., Electro-Technical Products Div.  
SILALITE—Electric Auto-Lite Co.  
SILASTIC—Dow Corning Corp.  
SILBESTOS—Sun Chemical Corp., Electro-Technical Products Div.  
SILCOBEST—Silicone Insulation, Inc.  
SILECTRON—Arnold Engineering Co.  
SILENT BREEZE—Meier Electric & Machine Co., Inc.  
Silent Hoist & Crane Co., 841-877 63rd St., Brooklyn 20, New York  
SILENT-KING—Cable Electric Products, Inc.  
SILENT SENTINELS—Westinghouse Electric Corp.  
Silex Co., 80 Pilny St., Hartford 2, Conn.  
SILIC-O-NETIC—Heinemann Electric Co.  
SILICOHM—Dale Products, Inc.  
Silicone Insulation, Inc., 567 Third Ave., N. Y. 16, N. Y.  
SILIMITE—Allis-Chalmers Manufacturing Co.  
SILITEX—Anaco Wire & Cable Co.  
SILTUBE—All-State Welding Alloys Co., Inc.  
SILV-A-FLEX—Alphaduct Wire & Cable Co.  
SILVALOY—Linde Air Products Co.  
SILVER BEAUTY—Triple-A-Specialty Co.  
SILVER DOT—Silvray Lighting, Inc.  
SILVER FLASH—Borg-Warner Corp., Atkins Saw Div.  
SILVER KING—Boston Woven Hose & Rubber Co.  
SILVER SPOT—Silvray Lighting, Inc.  
SILVER STEEL—Borg-Warner Corp., Atkins Saw Div.  
SILVER-TIP—Hunter Sales Co., Inc., R. N.  
SILVERCEL—Yardney Electric Corp.  
SILVERSTAT—Westinghouse Electric Corp.  
SILVERSTREAK—Link-Belt Co.  
SILVERTEX—Erie Resistor Corp.  
Silvery Pipe Bender Co., 2215 Brighton Ave., Kansas City 27, Missouri  
Silvray Lighting, Inc., 100 West Main St., Bound Brook, New Jersey  
SIM-PLY-TROL—Assembly Products, Inc.  
Simes Co., Inc., 114 15th Ave., College Point, L. I., N. Y.  
Simonski Co., G. S.—see Lucifer Furnaces, Inc.  
SIMPLE—Burkhard Mfg. Corp.  
Simplex Electric Co., 5136 Park Ave., Sycamore, Ill.  
SIMPLEX—Desmond-Stephan Mfg. Co.  
SIMPLEX—Speed Queen Corp.  
SIMPLEX—Specialty Elevator Corp.  
SIMPLEX—Templeton Kenly & Co.  
SIMPLEX—Weiss & Biheller Merchandise Corp.  
Simplex Co., 1139-41 N. MacArthur Blvd., Springfield, Ill.  
Simplex Jack Co.—see Templeton, Kenly & Co.  
SIMPLEX JENNY—Templeton, Kenly & Co.  
Simplex Time Recorder Co., Alice St., Gardner, Mass.  
Simplex Wire & Cable Co., 79 Sidney St., Cambridge 39, Massachusetts  
Simplex Control Company—see Assembly Products, Inc.  
Simpson Co., 1060 E. 11 St., Oakland 6, Calif.

Simpson Electric Co., Div. of American Gage & Machine Co., 5200 W. Kinzie St., Chicago 44, Ill.  
Simpson Mfg. Co., Inc., Mark, 32-28 49th St., Long Island City 3, New York  
Simpson Screen Co.—see Simpson Co.  
SINFRA KNITTER—Fidelity Machine Co., Inc.  
SIOUX—Albertson & Co., Inc.  
SIRENO—Portable Light Co., Inc.  
Sireno Co., Inc., 214 William St., New York 38, N. Y.  
SIRVENE—Chicago Rawhide Mfg. Co.  
SIRVIS—Chicago Rawhide Mfg. Co.  
SISCO—Swedish Iron & Steel Corp.  
SITE SAVER—International Lighting Mfg. Co.  
Sittler Corp., 13 North Ada St., Chicago 7, Illinois  
SIX-WAY—Tail Bender, Inc.  
SKEDDODLE—Reynolds Electric Co.  
Skill Corporation, 5033 Elston Ave., Chicago 30, Illinois  
SKILDRILL—Skill Corp.  
SKILLET—New Haven Clock & Watch Co.  
Skilaw, Inc.—see Skill Corp.  
Skinner Chuck Co., Skinner Electric Valve Div., 95 Edgewood Ave., New Britain, Conn.  
SKIPTOOTH—Barnes Co., Inc., W. O.  
SKY-BLAST—Robbins & Myers, Inc.  
SKY-GLD—Benjamin Electric Mfg. Co.  
SKY/LIME—Electro Silv-A-King Corp.  
SKY STREAK—American Electric Cable Co.  
SKY-TIE—Adalat Mfg. Co.  
SKY-WORKER—Maxwell Equipment Co.  
SKYLIFT—Automatic Transportation Co.  
SKYLIGHT—Macbeth Daylighting Corp.  
SKYLIKE—Silvray Lighting, Inc.  
SKYLOUVER—Electro Silv-A-King Corp.  
SKYLUX—Curtis Lighting, Inc.  
SKYRAY—Electro Silv-A-King Corp.  
Slater Appliances, Inc.—see Slater Electric & Mfg. Co., Inc.  
Slater Electric & Mfg. Co., Inc., 56th St. & 37th Ave., Woodside 77, New York  
SLATER-LOCK—Slater Electric & Mfg. Co., Inc.  
Slaughter Co., 1700 Nicklin Ave., Piqua, Ohio  
SLEEVOL—Dodge Mfg. Co.  
SLENDYNE—Shure Brothers, Inc.  
SLIDA-LINK—Yorkville Metal Products Co.  
SLIDE-A-LINK—Meter Devices Co.  
SLIM-X—Shure Brothers, Inc.  
SLIMAIR—Electro-Voice, Inc.  
SLIPKNOT—Plymouth Rubber Co.  
SLIPSPY—Westinghouse Electric Corp.  
SLO-SPEED—Sterling Electric Motors, Inc.  
SLUG-IN—Star Expansion Bolt Co.  
SLUMBEREST—Electric Parts Corp.  
SLYVER-CLAD—C & D Batteries, Inc.  
Small Motors, Inc., 2076 Elston Ave., Chicago 14, Illinois  
Smith Daland—see Electric Arc, Inc.  
Smith-Gates Corp., Plainville, Conn.  
Smith Iron Co., A. L. Smithcraft Lighting Div., 217 Everett Ave., Chelsea 50, Mass.  
Smith & Serrell, Inc., 192 Washington St., Newark 2, New Jersey  
Smith & Sons Corp., Jas. H.—see Smith-Victor Corp.  
Smith-Victor Corp., Griffith, Ind.  
Smith Welding Equipment Corp., 2633 Fourth St., S. E., Minneapolis 14, Minnesota  
Schoenfeld Lighting Div., A. L. Smith Iron Co., 217 Everett Ave., Chelsea 50, Mass.  
SMITTY—Hunter Tools  
SMOKGAGE—Ess Instrument Co.  
Smoot Engineering Co.—see Reoublic Flow Meters Co.  
Smoot-Holman Co., 321 N. Euclid Ave. (P. O. Box 398), Inglewood, Calif.  
SNAP-ACTION—Buchanan Electrical Products Corp.  
SNAP-IN—Reichert Floot & Manufacturing Co.  
SNAP-LOCK—National Ace Company  
Snap-on Tools Corp., 8028-28th Ave., Kenosha, Wisconsin  
SNAP STRAP—Blackhawk Industries  
SNAPICOIL—Wiremold Co.  
SNAPIN—Star Expansion Bolt Co.  
SNAPIT—Cable Electric Products, Inc.  
SNAPPER—Johnson-Williams, Ltd.  
SNO-CAP—Stratfield Co.  
SNO-FLAKE—Curtis Lighting, Inc.  
SNO-QUEEN—Victory Metal Mfg. Corp.  
SNOWLITE—Luxor Lighting P Products, Inc.  
SNUGFIT—Elwood Co.  
SNUGFIT—Paine Co.  
Snyder & Son, Inc., M. L., Jasper & York Sts., Phila. 25, Pa.  
Soapstone Co.—see Soapstone Duct Co.  
Soapstone Duct Co., 110 Linfield Dr., Menlo Park, California  
SODALITE—Electric Auto-Lite Co., Wire and Cable Div.  
Sola Electric Co., 4633 West 16th St., Chicago 50, Illinois  
SOLAR—Battle Creek Equipment Co.  
Solar Electric Corp., 121 Central Ave., Warren, Pa.  
SOLAR GLOW—Westinghouse Electric Corp.  
Solar Light Mfg. Co., 1357 South Jefferson St., Chicago 7, Illinois  
SOLAR LITE—Atlas Electric Devices Co.  
SOLARLITE—Solar Light Mfg. Co.  
SOLAVOLT—Sola Electric Co.  
SOLDERALL—Branch Manufacturing Corp.  
SOLDEREZE—Phelps Dodge Copper Products Corp.  
SOLDERMASTER—Hexacon Electric Co.  
SOLITARM—Aircraft-Marine Products, Inc.  
SOLLITE—Westinghouse Electric Corp., Lighting Div.  
Solux Corp., 58-17 28th Ave., Woodside 77, L. I., N. Y.  
SOLVO-MISER—Hoyt Manufacturing Corp.  
Sonoco Products Co., Hartsville, S. C.  
SONODYNE—Shure Brothers, Inc.  
Sonotone Corp., Elmford, N. Y.  
Sorenson & Company, Inc., 375 Fairfield Ave., Stamford, Connecticut



Sorgel Electric Company, 638 West National Ave., Milwaukee 4, Wisconsin  
 Sound Equipment Corp., Kwikheat Mfg. Co. Div., 3732 San Fernando Rd., Glendale 4, Calif.  
 South Chester Corp., Southco Division, Lester, Penna.  
 Southeast Lighting, Inc., 514 Atlanta Ave., Charlotte 1 N. C.  
 Southeastern Elevator Co., 81 Currier St., N. E., Atlanta 3, Georgia  
 Southern Carbon Brush Co., Inc., 7-18th St. S. W. (P. O. Box 1720), Birmingham 6, Ala.  
 Southern Electric Products, 202 S. Towers St. (P. O. Box 406), Anderson, S. C.  
 Southern Electrical Corp., Inc., P. O. Box 969, Chattanooga 5, Tenn.  
 Southern Electrical Equipment Co., 308 West Bland St., Charlotte 3, North Carolina  
 Southern Elevator Co., Inc., 221 Ash St. (P. O. Box 2528), Greensboro, N. C.  
 Southern Heater Corp., 133 E. Palmer, Compton, Calif.  
 Southwest Products Co., 1705 S. Mountain Ave., Duarte, Calif.  
 Southwestern Industrial Electronics Co., 2831 Post Oak Rd. (P. O. Box 13058), Houston 19, Tex.  
 Southwire Company, Inc., Carrollton, Georgia  
 SPACELITER—Stieber Manufacturing Co.  
 SPACEMASTER—Lewis-Shepard Products, Inc.  
 SPACE-SAVER—Hyster Co.  
 SPACIALITE—Ainsworth Lighting, Inc.  
 Spang-Chalfant Div., National Supply Co., Two Gateway Center (P. O. Box 416), Pittsburgh 30, Pa.  
 SPANGLER—Spang-Chalfant Div., National Supply Co.  
 SpanMaster Crane Corp. of America, Div. of Angelus Engineering Corp., 10727 S. Garfield Ave., South Gate, Calif.  
 SPAR-KING—Spartan Saw Works, Inc.  
 SPAR-OAK—Graton & Knight Co.  
 SPAR-STOCK—Spartan Saw Works, Inc.  
 Spargo Wire Company, Railroad St., Rome, New York  
 SPARGROUND—Spartan Saw Works, Inc.  
 SPARTAN—Graton & Knight Co.  
 Spartan Saw Works, Inc., 152 Fisk Ave., Springfield 7, Massachusetts  
 SPATTERPROOF—Radiant Lamp Corp.  
 Spaulding Fibre Company, Inc., 310 Wheeler St., Tonawanda, New York  
 SPAULDITE—Spaulding Fibre Company, Inc.  
 SPAULDON—Spaulding Fibre Co., Inc.  
 Speaker Corp., J. W., 3059 N. Weil St., Milwaukee 12, Wis.  
 SPEAR—Jordan Co.  
 Special Products Co., P. O. Box 188, Rockville 2, Md.  
 Specialties, Inc., 2936 Sacramento St., Pittsburgh 4, Pennsylvania  
 Specialty Device Co.—see Chance Co., A. B.  
 Specialty Mfrs. & Distributors, 508 New York St., Aurora, Ill.  
 SPECO—Pfanzahl Laboratories, Inc.  
 SPECO—Special Products Co.  
 SPECON—Fairchild Engine & Airplane Corp., Speed Control Div.  
 Spedon Pipe Clamp Co., 33-51 60th Pl., Woodside 77, N. Y.  
 SPEE-D-DRILL—Central Paint & Varnish Works, Inc.  
 SPEE-DEE—Peck & Harvey Mfg. Corp.  
 SPEED—Tinnerman Products, Inc.  
 SPEED BIT—Dibley Mfg. Co., Inc., Edward L. Speed Control Corp.—see Speed Control Div., Fairchild Engine & Airplane Corp.  
 Speed Control Div., Fairchild Engine & Airplane Corp., 1450 E. 289 St., Wickliffe, Ohio  
 SPEED E LK—Eastern Metal of Elmira, Inc.  
 SPEED HEATER—Westinghouse Electric Corp.  
 SPEED-LINE—Garden City Plating & Mfg. Co.  
 Speed Queen Corp., Ripon, Wis.  
 SPEED SORT—Associated Research, Inc.  
 SPEED SPIRAL—Super Tool Mfg. Co.  
 SPEED-TROL—Sterling Electric Motors, Inc.  
 Speed Way Mfg. Co., 1834 S. 52 Ave., Cicero 50, Ill.  
 SPEEDAIR—Dayton Electric Mfg. Co.  
 SPEEDDRILL—Speed Way Mfg. Co.  
 SPEEDDEX—General Cement Mfg. Co.  
 SPEEDGRINDER—Speed Way Mfg. Co.  
 SPEEDLIFT—Lewis-Shepard Products, Inc.  
 SPEEDLITE—Boston Woven Hose & Rubber Co.  
 SPEEDLOCK—Waco Mfg. Co.  
 SPEEDMASTER—Accurate Engineering Co.  
 SPEEDMASTER—Peck & Harvey Mfg. Corp.  
 SPEEDMATIC—Porter-Cable Machine Co.  
 SPEEDMOUNT—Bell Electric Company  
 SPEEDSANDER—Speed Way Mfg. Co.  
 SPEEDSAW—Speed Way Mfg. Co.  
 SPEEDY-CUT—Peerless Machine Co.  
 Speer Carbon Co., International Graphite & Electrode Div., Theresa St., St. Marys, Pa.  
 Speidel Elevator Corp., 245 West Buttonwood St., Reading, Pennsylvania  
 Speidel Mfr., J. G.—see Speidel Elevator Corp.  
 Spencer Industries, 1509 N. Mascher St., Phila. 22, Pa.  
 Spencer Studios—see Spencer Industries  
 Spencer Turbine Co., 486 New Park Ave., Hartford 6, Connecticut  
 Spero Electric Corp., 20500 St. Clair Ave., Cleveland 17, Ohio  
 Sperry Corp., Wheeler Insulated Wire Co. Div., 150 E. Aurora St., Waterbury 20, Conn.  
 Spertl Faraday, Inc., 1322 E. Church St., Adrian, Mich.  
 Sperti Faraday, Inc., Cooper Hewitt Electric Co. Div., 720-32 Grand St., Hoboken, N. J.  
 SPHERE—Versen Co., Kurt  
 SPHEREX—Electro-Voice, Inc.  
 SPHFOO—Fairbanks Co.  
 SPHEROLITE—Line Material Co.

Spies Electric Works, 564 W. Van Buren St., Chicago 7, Ill.  
 SPINDRER—Easy Washing Machine Corp.  
 SPINTITE—Stevens Walden, Inc.  
 SPIRAKORE—General Electric Co., Apparatus Sales Div.  
 SPIRALATOR—Easy Washing Machine Corp.  
 SPIRALOK—American Metal Moulding Co.  
 SPIRALON—Surprenant Mfg. Co.  
 SPLAC—Westline Products Div., Western Lithograph Co.  
 Split Ballbearing Corp., 211 Mechanic St., Lebanon, New Hampshire  
 SPORTLITE—Duro-Test Corp.  
 SPORTO—Appleton Electric Co.  
 SPORTSLITER—Stieber Manufacturing Co.  
 SPOT-LITE—Canadian Radium & Uranium Corp.  
 SPOTLAY—Makepeace Co., D. E.  
 SPOTTY—Curtis Lighting, Inc.  
 Sprague Electric Co., North Adams, Massachusetts  
 Sprague Specialties Co.—see Sprague Electric Co.  
 SPRAYO X—Preformed Line Products Co.  
 SPRING-ACT-O—Waage Manufacturing Co.  
 SPRING-BEARING—West Bend Equipment Corp.  
 Spring Load Mfg. Corp., 3610 First Ave. South, Seattle 4, Wash.  
 SPRING-O-MATIC—Industrial Electrical Works  
 SPRING-TITE—U. S. Expansion Bolt Co.  
 Springfield Electrical Specialties, Inc., 120 Wooster St., New York 12, N. Y.  
 SPRINGIN—Star Expansion Bolt Co.  
 SPRINGWING—Paine Company  
 Square D Company, 6060 Rivard St., Detroit 11, Michigan  
 SQUARE DUCT—Square D Co.  
 SQUEE-G—Chicago Belting Div., Chicago-Allis Mfg. Corp.  
 SQUEEZ—Reliable Electric Co.  
 STA-KOLD—Victory Metal Mfg. Corp.  
 STA-KON—Thomas & Betts Co.  
 STA-WARM—Warm Electric Co., 553 North Chestnut, Ravenna, Ohio  
 STAR-LOK—Federal Electric Products Co.  
 STABILINE—Superior Electric Co.  
 Stackpole Carbon Co., Tannery St., St. Marys, Pennsylvania  
 STACKSWITCH—Minneapolis-Honeywell Regulator Co.  
 STACO—Standard Electrical Products Co.  
 Stahl Metal Products, Inc., 3490 W. 140 St., Cleveland 11, Ohio  
 STAINLEND—Arcos Corp.  
 STAINWELD—Lincoln Electric Co.  
 STAIRMASTER—Fairbanks Co.  
 STAKLITE—Appleton Electric Co.  
 STALEY—Electric Switch Corp.  
 Stamford Casting Co., Inc., 796 Atlantic St., Stamford, Conn.  
 Stamford Lighting—see Stamford Metal Specialty Co., Inc.  
 Stamford Metal Specialty Co., Inc., 429 West Broadway, New York 12, New York  
 Stanat Mfg. Co., 47-24 37th St., L. I. C., N. Y.  
 Stanat Tool & Machine Co.—see Stanat Mfg. Co.  
 STANCOR—Chicago Standard Transformer Corp.  
 STANDARD—Circle F Mfg. Co.  
 STANDARD—Specialty Device Co.  
 Standard Asbestos Mfg. Co., 860 W. Evergreen Ave., Chicago 22, Ill.  
 Standard Dayton Corp., Standard Electric Div., 301 S. Marion St., Dayton, Ohio  
 Standard Electric Co., Inc., 3016 Austin Highway, San Antonio 9, Tex.  
 Standard Electric Div., Standard Dayton Corp., P. O. Box 1001, Dayton 1, Ohio  
 Standard Electric Manufacturing Co., Inc., Haddon Ave., West Berlin, New Jersey  
 Standard Electric Time Co., 129 Logan St., Springfield, Mass.  
 Standard Electrical Products Co., 2240 E. Third St., Dayton 3, Ohio  
 Standard Electronic Corp., Subsidiary of Claude Neon, Inc., 285 Emmet St., Newark 5, N. J.  
 Standard Hygrade Electric Co., Inc., 3913-8th Ave., Brooklyn 32, N. Y.  
 Standard Novelty and Lamp Co., 823 S. Wabash Ave., Chicago 5, Ill.  
 Standard Products Corp., 356 South Ave., Whitman, Massachusetts  
 Standard Railway Fuse Corp., Signal Flare Div., P. O. Box 30, Needham Heights 94, Mass.  
 Standard Rite-Lite Co., 4206 West Ave., Ashtabula, Ohio  
 Standard Steel Cabinet Co., 3701-15 Milwaukee Ave., Chicago 41, Ill.  
 Standard Transformer Co., 140 Dana St., N.E., Warren, Ohio  
 Standard Transformer Corp.—see Chicago Standard Transformer Corp.  
 Standard Transmission Equipment Co., 70 West Union St., Pasadena 1, California  
 STANDCO—Sticht Co., Inc., Herman H.  
 STANEDON—General Cable Corp.  
 Stanley-Carter Co.—see Stanley Electric Tools  
 Stanley Electric Tools, 436 Myrtle St., New Britain, Conn.  
 Stanley Works, North Bros. Mfg. Co. Div., Lehigh Ave. & American St., Phila. 33, Pa.  
 Stanley Works, Stanley Electric Tools Div.—see Stanley Electric Tools  
 Stanor Co.—see Pucel Enterprises, Inc.  
 STAR—American Brass Co.  
 STAR—Ames Spot Welder Co., Inc.  
 STAR—Clemson Bros., Inc.  
 STAR—Gelber Co., Samuel S.  
 STAR—Standard Electric Co., Inc.  
 STAR—Wakefield Co.  
 Star-A Electric Manufacturing Co., Inc., 269-271 Meserole St., Brooklyn 6, New York  
 Star Bit & Tool Co.—see Product Tool & Star Bit Co.

Star Electric Motor Co.—see Star-Kimble Motor Div., Miehle Printing Press & Mfg. Co.  
 Star Expansion Bolt Co., Inc., 147 Cedar St., New York 6, New York  
 Star Fuse Co., Inc., 235 Canal St., N. Y. 13, N. Y.  
 STAR-GLO—Electro Silv-A-King Corp.  
 Star Headlight & Lantern Co., Main and Jacob St., Honeyey Falls, N. Y.  
 Star-Kimble Motor Div., Miehle Printing Press & Mfg. Co., 200 Bloomfield Ave., Bloomfield, N. J.  
 Star Light, Inc.—see Moe Light, Inc.  
 STAR-LINER—Garden City Plating & Mfg. Co.  
 STAR-LUX—Revere Electric Mfg. Co.  
 Star Plier Co., Inc.—see Star Fuse Co.  
 Star Porcelain Co., Muirhead Ave., Trenton 9, N. J.  
 STARE-BREAK—Penwood Numechrom Co.  
 STARFLECTOR—Mimar Products, Inc.  
 Starrel Company, L. S., 50 Crescent St., Athol, Massachusetts  
 START-O-METIC—Airservo Mfg. Co., Inc.  
 STARZIT—Aircraft Specialties, Inc.  
 States Co., 19 New Park Ave., Hartford 6, Connecticut  
 STATESMAN—Industrial Lamp Corp.  
 STATIGATOR—Hewson Co., Inc.  
 STATICK—Hirschman-Pohle Co., Inc.  
 STATICON—Formica Co.  
 STATIKIL—Doyle Co., J. E.  
 STATISCOPE—Mineralac Electric Co.  
 Stauffer Chemical Co., 380 Madison Ave., New York 17, N. Y.  
 STAVOLT—McColpin-Christie Corp.  
 STAXAUSTER—Allen Cooler & Ventilator, Inc.  
 STAYSALITE—Klein & Sons, Mathias  
 STAZ-RITE—Utilities Service Company  
 STAZIN—Star Expansion Bolt Co.  
 STEACAPS—Micamold Radio Corp.  
 Steam Electric Mfg. Co., 3456 South Grand Blvd., St. Louis 18, Missouri  
 Stearns Magnetic, Inc., 698 S. 28 St., Milwaukee 46, Wis.  
 Steber Manufacturing Co., 2700 Roosevelt Rd., Broadview, Illinois  
 STEBERLITE—Stieber Manufacturing Co.  
 Steel Co., Herman D., 225 Lafayette Bldg., Philadelphia 6, Pennsylvania  
 Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 35, Pa.  
 Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y.  
 STEEL GRID—Post Glover Electric Co.  
 Steelduct Co., Republic Bldg., Youngstown, Ohio  
 STEELETS—Steel Electric Products Co., Inc.  
 STEELFLEX—Falk Corp.  
 STEELGRIP—Armstrong-Bray & Co.  
 STEELWELD—Cleveland Crane & Engineering Co.  
 Steelweld Machinery Div.—see Cleveland Crane & Engineering Co.  
 STEELWING—Hubbard & Co.  
 Steem Electric Corp.—see Steam Electric Mfg. Co.  
 STEEMCO—Steam Electric Mfg. Co.  
 STEEMETTE—Steam Electric Mfg. Co.  
 STEEMRITE—Steam Electric Mfg. Co.  
 Steiner-Ives Co., Springfield Rd., Union, N. J.  
 STELCO—Standard Electric Co., Inc.  
 STELLITE—National Acme Co., Electrical Mfg. Div.  
 STEMCO—Stevens Mfg. Co., Inc.  
 STEMPEL—Snyder & Son, Inc., M. L.  
 STEP CONTROLLER—Minneapolis-Honeywell Regulator Co.  
 Stephens-Adamson Mfg. Co., Ridgeway Ave., Aurora, Illinois  
 Stephens Mfg. Corp., 8538 Warner Drive, Culver City, Calif.  
 STERILAIRE—Ultra-Violet Products, Inc.  
 STERILAMP—Westinghouse Electric Corp., Lamp Div.  
 STERILITE—Moe-Bridges Corp.  
 STERITRON—Hanovia Chemical & Manufacturing Co.  
 STERLING—Chicago Belting Div., Chicago-Allis Mfg. Corp.  
 STERLING—Diamond Saw Works, Inc.  
 STERLING—Waldorf Heater Company  
 Sterling Blower Co., 791 Windsor St., Hartford, Conn.  
 Sterling Bolt Co., 363 W. Erie St., Chicago 10, Ill.  
 Sterling Cable Div.—see Electric Auto-Lite Co., Wire and Cable Div.  
 Sterling Electric Motors, Inc., 5401 Telegraph Rd., Los Angeles 22, California  
 Sterling Siren Fire Alarm Co., Inc., 12 Bartlett St., Rochester 8, N. Y.  
 Sterling Transformer Corp., 297 N. 7th St., Brooklyn, N. Y.  
 Sternberg Mfg. Co., 4510 Addison St., Chicago 41, Ill.  
 STETEX—Stevens Co., A. T.  
 Stevens Co., A. T., 118 E. 28 St., N. Y. 16, N. Y.  
 Stevens Aircraft Corp.—see Revere Corp. of America  
 Stevens Appliance Truck Co., P. O. Box 897, Norton Rd., Augusta, Georgia  
 Stevens Mfg. Co., Inc., P. O. Annex 1007, Mansfield, Ohio  
 Stevens Walden, Inc., 400 Shrewsbury St., Worcester 4, Mass.  
 Stewart Bros. Div., Instrument Laboratories, 315 W. Walton Pl., Chicago 10, Ill.  
 Stewart Industries, Inc., 316 E. St. Joseph St., Indianapolis 2, Ind.  
 Stewart Mfg. Co., Inc.—see Stewart Industries, Inc.  
 STEWART-WARNER—Merrill Engineering Laboratories  
 Sticht Co., Inc., Herman H., 27 Park Place, New York 7, New York  
 STICKLEBACK—Tec Imports  
 Still-Man Co.—see Still-Man Equipment Corp.  
 Still-Man Equipment Corp., 429 E. 164 St., Bronx 56, N. Y.  
 Stimple & Ward Co., P. O. Box 5806, Pittsburgh 9, Pa.  
 Stimpson Co., Inc., Edwin B., 70 Franklin Ave., Brooklyn 5, N. Y.  
 STIXWEL—Clifton Manufacturing Co., Inc.  
 St. Louis—see Saint Louis

# COMPANY AND TRADE NAME DIRECTORY

STWOLA—Standard Novelty and Lamp Co.  
STOCK-BIN-LITE—Benjamin Electric Mfg. Co.  
STOCK PICKER—Boi-Away Truck Mfg. Co., Inc.  
Stocker & Yale, Inc., Green St., Marblehead, Mass.  
STOCKLITE—Appleton Electric Co.  
Stockwell Transformer Co. of Ohio, 884 W. Waterloo Rd., Akron 19, Ohio  
STOK-FOUNT—International Electric Fence Co., Inc.  
STOKERELAY—Minneapolis-Honeywell Regulator Co.  
STOKERSWITCH—Minneapolis-Honeywell Regulator Co.  
STOKERTIMER—Minneapolis-Honeywell Regulator Co.  
Stokes Machine Co., F. J., 5500 Tabor Rd. (Olney P. O.), Phila. 20, Pa.  
Stokes Molded Products Div., Electric Storage Battery Co., Taylor & Webster Sts., Trenton, N. J.  
Stokes Molded Products, Inc.—see Stokes Molded Products Div., Electric Storage Battery Co.  
Stokes Rubber Co.—see Stokes Molded Products Div., Electric Storage Battery Co.  
STOKOLITE—Stokes Molded Products Div., Electric Storage Battery Co.  
Stonco Electric Products Co., 333 Monroe Ave., Kenilworth, New Jersey  
Stone Mfg. Co.—see Stonco Electric Products Co.  
Stone Paper Tube Co., 900 Franklin St., N.E., Washington 17, D. C.  
Stop-Fire, Inc., 125 Ashland Pl., Brooklyn 1, N. Y.\*  
STOP-N-GO—Hansen Mfg. Co., Inc.  
STORACK—American Steel and Iron Works  
STORAGEMASTER—Heartel Co., Walter  
STORE-LITER—Curtis Lighting, Inc.  
STORM-KING—Lighting Products, Inc.  
Stove & Co., Roy C.—see Air-Tron, Inc.  
Stover Lock Nut & Machinery Corp., Hilton & Holly Sts., Easton, Pa.  
Stow Mfg. Co., 162 Shear St., Binghamton, N. Y.  
STOWAWAY—Lennox Furnace Co.  
STOWAY—Clark Equipment Co., Industrial Truck Div.  
STRADDLE TRUCK—Hyster Co.  
STRAIGHT LINE—Lyon Rural Electric Co.  
STRANDLINK—Reliable Electric Co.  
STRANDWISE—Reliable Electric Co.  
STRATA-WOOD—Formica Co.  
STRATELINE—Pyle-National Co.  
Stratfield Co., 434 Grand St., Bridgeport 4, Conn.  
STRATO-RAY—Pyrite & Co., Inc.  
STREAMLIND—Klein & Sons, Mathias Streeter-Amet Co., 4105 Ravenswood Ave., Chicago, Ill.  
STRING-A-LITE—Joy Mfg. Co.  
STRINGER—Utilities Safety Supply Co., Inc.  
STRIPLEX—Burbank Electrical Products  
STRIPMASTER—Ideal Industries, Inc.  
STROBOLUX—General Radio Company  
STROBOTAC—General Radio Company  
STROM—Martin-Rockwell Corp.  
STROMBERG-CANNON—Stromberg Time Corp.  
Stromberg Electric Co.—see Stromberg Time Corp.  
Stromberg Time Corp., 135 S. Main St., Thomaston, Conn.  
STRONGHOLD—Haartz-Mason, Inc.  
STRONGHOLD—Rhoads & Sons, J. E.  
STRUCTOR—Steel City Electric Co.  
Struthers-Dunn, Inc., Pittman, N. J.\*  
STUD DRIVER—Remington Arms Co., Inc.  
STUDIN—Star Expansion Bolt Co.  
Stuebeland Mfg. Co.—see Lamp Snatchers Co.  
Stupakoff Ceramic & Mfg. Co., Latrobe, Pennsylvania  
STUPALITH—Stupakoff Ceramic & Mfg. Co.  
STURDIFLEX—Steeber Manufacturing Co.  
Sturtevant Div., Westinghouse Electric Corp., Damen St., Hyde Park, Boston 36, Mass.  
STYLITE—Prescolite Mfg. Corp.  
STYROFLEX—Natar Corp.  
STYROFLEX—Phelps Dodge Copper Products Corp.  
SUBALOX—Subox, Inc.  
Subox, Inc., Fairmount Plant, Hackensack, New Jersey  
Subox Laboratories, Inc., 1197 McCarter Highway, Newark, N. J.  
SUDDEN DEPTH—Paine Company  
Sudenga Iron Works, George, Iowa  
Suffex Corp., 33-40 57th St., Woodside 77, New York  
Sulfito, Inc., 1143 E. Jersey St., Elizabeth 4, N. J.  
SUMMER BREEZE—Taylor Corp.  
Summit Instrument Co.—see Seely Instrument Co., Inc.  
SUMPTRON—Square D Co.  
SUN-AIRE—Sun Kraft Health Products, Inc.  
Sun Chemical Corp., Electro-Technical Products Div., 113 East Centre St., Nutley 10, New Jersey  
Sun Electric Products, Inc., 20 South Day St., Orange, New Jersey  
Sun Kraft Health Products, Inc., 351 E. Ohio St., Chicago 11, Ill.\*  
Sun-Lite Mfg. Co., 2555 Bellevue Ave., Detroit 7, Mich.  
Sun Oil Company, 1608 Walnut St., Philadelphia 3, Pennsylvania  
SUN VALLEY—Bersted Mfg. Co.  
SUNARC—Battle Creek Equipment Co.  
Sunbeam Lighting Co., 777 East 14th Place, Los Angeles 21, California  
Sundh Electric Co.—see Clark Controller Co.  
SUNETTE—Versen Company  
SUNFLASH—Pacemite Laboratories  
SUNNETTE—Manovia Chemical & Mfg. Co.  
SUNOCO—Sun Oil Company  
Sunrise Products Co.—see Vemaline Products Co.  
Sunroc Refrigeration Co., Glen Riddle, Pa.  
SUNSWITCH—Ripley Co., Inc.  
Sunwarm, Inc., 2353 Johnson City Highway, Box 263, Kingsport, Tenn.  
SUPAIRTHERMAN—Norbreg Mfg. Co.  
SUPER—Belgian Electric Sales Corp.  
SUPER-CAST—Holub Industries, Inc.  
SUPER CORONOL—General Electric Co., Construction Materials Div.  
SUPER CYCLE—Chicago Pneumatic Tool Co.

SUPER DUTY—Portable Electric Tools, Inc.  
SUPER EIGHT—American Floor Surfacing Machine Co.  
SUPER EONITE—U. S. Rubber Co.  
SUPER FINE—O. F. Glass Fibers, Inc.  
SUPER GRIP—Diamond Expansion Bolt Co., Inc.  
SUPER GRIP—Superior Fuse & Mfg. Co., Inc.  
Super-Grip Anchor Bolt Co., Inc., 3333 North 22nd St., Philadelphia 40, Pennsylvania  
SUPER HUSKIE—Mercury Manufacturing Co.  
SUPER-INDUSTRIAL—National Specialties Co., Inc.  
SUPER-LUX—Westinghouse Electric Corp., Lighting Div.  
SUPER-NEMCOITE—New England Mica Company, Inc.  
SUPER POINT—Springfield Electrical Specialties, Inc.  
SUPER-POWER—Ramset Fasteners, Inc.  
SUPER POWER—Coffing Hoist Div., Duff-Norton Co.  
SUPER-SAFE—Disco & Sons, Inc., Henry  
SUPER SAW—RCS Tool Sales Corp.  
SUPER SERVICE—General Cable Corp.  
SUPER SERVICE—National Super Service Co.  
SUPER-7—Allis-Chalmers Mfg. Co.  
SUPER SLUGGER—Tempo Products Co.  
SUPER SOLAR—Battle Creek Equipment Co.  
SUPER-SONAX—Electro-Voice, Inc.  
SUPER-SPEED—RCS Tool Sales Corp.  
SUPER-STERLING—Diamond Saw Works, Inc.  
SUPER-STIK—Superior Insulating Tape Co.  
SUPER SUCTION—National Super Service Co.  
Super Tool Co., 21650 Hoover Rd., Detroit 13, Michigan  
SUPER-TRON—Superior Fuse & Mfg. Co., Inc.  
SUPER XX—Super Flow Solder Co., Inc.  
SUPERBILT—Remington Corp., Remington Air Conditioning Div.  
SUPERBILT—Heatrite, Inc.  
SUPERCLAMP—Cincinnati Tool Co.  
SUPERDUCT—National Electric Products Corp.  
SUPERFAN—Queen Stove Works, Inc.  
SUPERFLAME—Queen Stove Works, Inc.  
SUPERFREEZE—Fogel Refrigerator Co.  
SUPERIOR—Eagle Electric Mfg. Co., Inc.  
SUPERIOR—National Supply Co.  
SUPERIOR—Round & Son, Inc., David  
SUPERIOR—Spang-Chaffant Div., National Supply Co.  
SUPERIOR—Wall Manufacturing Co., P.  
Superior American Fire Alarm Div.—see Safa Alarm Div., Fyr-Fyter Co.  
Superior Appliance Co., 73-79 Central Ave., Glendale 27, L. I., N. Y.  
Superior Bolt & Nut Co.—see Cap Screw & Nut Co. of America, Inc.  
Superior Carbon Products Co., 9115 George Avenue, Cleveland 5, Ohio  
Superior Electric Co., 83 Laurel St., Bristol, Conn.  
Superior Electric Mfg. Co., Inc.—see Eagle Electric Mfg. Co., Inc.  
Superior Fuse & Mfg. Co., Inc., 221 Hudson St., Hoboken, N. J.  
Superior Insulating Tape Co., 3100 Lambdin Ave., St. Louis 15, Missouri  
Superior Porcelain Co., 931½ Market St., Parkersburg, West Virginia  
Superior Staple Mfg. Co., Fitchburg, Mass.  
SUPERJUSTABLE—Williams & Co., J. H.  
SUPERLIGHT—White Metal Rolling & Stamping Corp.  
SUPERLITE—General Cable Corp.  
SUPERMALLOW—Arnold Engineering Co.  
SUPERMATIC—National Pneumatic Co., Inc.  
SUPERMETIC—Serval, Inc.  
SUPERRENCH—Williams & Co., J. H.  
SUPERSEAL—Anaconda Wire & Cable Co.  
SUPERSEAL—Springfield Electrical Specialties, Inc.  
SUPERSEATH—General Cable Corp.  
SUPERSTAR—Steen-Brown, Inc.  
SUPERTAN—Ultra Violet Ray Labs, Inc.  
SUPERTEL—General Cable Corp.  
SUPERTITE—Engelhard, Inc., Charles  
SUPERTUF—General Cable Corp.  
SUPERVAC—Central Scientific Co.  
SUPERVENT—Moore Co.  
SUPREME—Collyer Insulated Wire Co.  
Supreme Electric Products Co., 194 Vassar St., Rochester 7, N. Y.  
Supreme Lighting Co., 600 E. Turner St., Los Angeles 12, Calif.  
SUR-GRIP—Matthews & Co., James H.  
SUR-LITE—House-O-Lite Corp.  
SURE-GRIP—Chance Co., A. B.  
SURE-STEP—Interstate Rubber Products Corp.  
SUREGRIIP—Armstrong-Bray & Co.  
SUREGRIP—Bridgeport Hardware Mfg. Corp.  
Surelite Products Co., 370 E. 152 St., N. Y. 55, N. Y.  
Surety Rubber Co., 123 Hall Ave., Carrollton, Ohio  
SURF-A-LINE—General Electric Co., Construction Materials Div.  
SURF-A-STAT—Crisse Controls Div., Acro Mfg. Co.  
SURFACEDUCT—National Electric Products Corp.  
SURFEX—Pass & Seymour, Inc.  
SURFINDICATOR—Brush Electronics Co.  
SURFLENE—Surprenant Mfg. Co.  
SURFLON—Surprenant Mfg. Co.  
SURFOLET—Porcelain Products, Inc.  
Surprenant Mfg. Co., 199 Washington St., Boston 8, Mass.  
Surrette Storage Battery Co., Inc., Jefferson Ave., Salem, Massachusetts  
SURVO—Surprenant Mfg. Co.  
SUTTON—Johnson Belting Co., Inc.  
Sutton Corp., O. A., 1812 West Second St., Wichita, Kansas  
SWEATRITE—Duntan Co., M. W.  
SWEDGE-ON—Wagner Mfg. Co., Inc.  
Swedish Iron & Steel Corp., 100 Quimby St., Westfield, N. J.  
Sweet Iron Works, A. L., 166 Glenwood Ave., Medina, N. Y.  
SWIFT—Martin Bros. Electric Co.  
SWING-WA—General Electric Co., Distribution Assemblies Dept.

Swiss Jewel Co., 225 Lafayette Bldg., Philadelphia 6, Pennsylvania  
SWITCH-KING—Cable Electric Products, Inc.  
SWITCH-O-LITE—Hoffman Engineering Corp.  
SWITCHETTE—General Electric Co., Apparatus Sales Div.  
SWITCHMAT—Recora Company  
SWIVEL LITE—Prescolite Mfg. Corp.  
Swiveller Co., Inc., 43-34th St., Brooklyn 32, New York  
SWIVELTES—Amplex Corp.  
SWIVO-BASE—Swiveller Co., Inc.  
SWIVOMATIC—Swiveller Co., Inc.  
SYL-O-BLACK—Mayer Corp.  
SYL-O-ETTE—Mayer Corp.  
SYL-O-WHITE—Mayer Corp.  
SYLPHON—Fulton Syphon Div., Robertshaw-Fulton Controls Co.  
SYLVALOY—Driver Co., Wilbur B.  
Sylvania Electric Products, Inc., 1740 Broadway, New York 19, N. Y.  
SYNCHRO-OPERATOR—Allis-Chalmers Manufacturing Co.  
SYNCHRO-TAROL—Westinghouse Electric Corp.  
SYNCHRO-VALVE—Bristol Company  
SYNCHROGLIDE—Westinghouse Electric Corp.  
SYNCHRON—Hansen Mfg. Co.  
SYNCHROSTAB—Electric Machinery Mfg. Co.  
SYNCHROVERTER—Bristol Company  
SYNCR-BREAK—Square D Company  
SYNCR-LAG—Superior Fuse & Mfg. Co., Inc.  
SYNCRGEOAR—U. S. Electrical Motors Inc.  
SYNCRSTAT—Iron Fireman Manufacturing Co., Electronics Div.  
SYNKOTE—Pistold Corp.  
SYNOR—Stokes Molded Products, Inc.  
SYNRUB—United States Rubber Co.  
SYNTHAMICA—Mycalox Corp. of America  
Synthane Corp., Oaks, Pa.  
SYNTHINOL—Rome Cable Corp.  
SYNTHITE—Dolph Co., John C.  
SYNTHOL—Crescent Insulated Wire & Cable Co.  
SYNTHOLVAR—Varflex Corp.  
Syntron Company, 690 Lexington Ave., Homer City, Pennsylvania  
Syracuse Twist Drill Co. Inc., 1046 S. Townsend St., Syracuse 3, N. Y.  
System Analyzer Corp., 700 W. State St., Nokomis, Ill.

## T

TA—Thomas Associates  
T&B—Thomas & Betts Co., Inc.  
T-D—Chase-Shawmut Company  
TEC—Circle F Mfg. Co.  
T-GRID—Electric Furnace Co.  
T-VENTILATOR—Airservo Mfg. Co., Inc.  
TIC—Technology Instrument Corp.  
TK—Tuttle & Kift, Inc.  
TTC—Swiveller Co., Inc.  
TAB-WELD—Electric Controller & Mfg. Co.  
TABLAST—American Wheelabrator & Equipment Corp.  
Taco West Corp.—see West Instrument Corp.  
Tack Corp.—see Hewson Co. Inc.  
Tal Bender, Inc., 417 North Water St., Milwaukee 2, Wisconsin  
Tal Prestal Bender, Inc.—see Tal Bender, Inc.  
Talk-A-Phone Company, 1512 South Pulaski Rd., Chicago 23, Illinois  
TALKMASTER—Dalmatronic Co.  
Taller & Cooper, Inc., 75 Front St., Brooklyn 1, New York  
TAMPYON—Star Expansion Bolt Co.  
TAMRES—General Electric Co., Construction Materials Div.  
TANGLE-PROOF—Hobbs Manufacturing Co.  
Tanglefoot Co., 314 Straight Ave., S.W., Grand Rapids 4, Mich.  
TANKMOBILE—Campbell-Hausfeld Co.  
TANKROL—Automatic Control Co.  
Tara Corp., Congress Drives Div., 3750 East Outer Dr., Detroit 34, Michigan  
TANNATE—Rhoads & Sons, J. E.  
TANTALYTIC—General Electric Co., Apparatus Sales Div.  
TAP GUN—Black & Decker Mfg. Co.  
TAPERDRUM—Art Metal Co.  
TAPERLOCK—Dodge Mfg. Corp.  
TARGET—Alden Products Co.  
TASCO—American Scaffolding Co.  
TASK-MASTER—Benjamin Electric Mfg. Co.  
Taylor Corp., 837 South Mahoning Ave., Alliance, Ohio  
Taylor Co., Halsey W., 137 North St., N.W., Warren, Ohio  
Taylor Fibre Co., Norristown, Pa.  
Taylor Tubes, Inc., 2312—W. Wabansia Ave., Chicago 47, Ill.\*  
Taylor-Winfield Corp., 1052 Mahoning Ave., Warren, Ohio  
Tazewell Mfg. Co.—see Micamold Radio Corp.  
Tec Imports, 14525 Bessemer St., Van Nuys, Calif.  
Tech Labs Inc., Bergen & Edsall Bldgs., Palisades Park, N. J.  
TECHNAMATIC—Capewell Mfg. Co.  
Techniflex Corp., 55 Jersey Ave., Port Jervis, N. Y.  
TECHNITE—Capewell Mfg. Co.  
Technology Instrument Corp., 531 Main St., Acton, Mass.  
Tecumseh Products Co., Tecumseh, Mich.  
TEEL—Dayton Electric Mfg. Co.  
TEELON—Benjamin Electric Mfg. Co.  
TEFLON—Electronic Mechanics Inc.  
TEKTOLOG—Fielden Instrument Div., Robertshaw-Fulton Controls Co.  
TEKTOR—Fielden Instrument Div., Robertshaw-Fulton Controls Co.

- Tektrenix, Inc., P. O. Box 831, Portland 7, Ore.  
 TEL-A-PIPE—Westline Products Div., Western Lithograph Co.  
 TEL-ALARM—Tigerman Engineering Co.  
 TEL-E-Lect Products, Inc., 10001 Minnetonka Blvd., Minneapolis 16, Minnesota  
 TEL-O-SET—Minneapolis-Honeywell Regulator Co.  
 TELAPPOACH—American District Telegraph Co.  
 TelAutograph Corp., 16 W. 61 St., New York 23, N. Y.  
 TELCO—General Cement Mfg. Co.  
 TELE-COM—Reora Company  
 TELE-HEET—Standard Hvac Electric Co., Inc.  
 TELEVISION—Penwood Numechron Co.  
 TELECABLE—Whitney Blake Co.  
 Telechron Dept., General Electric Co., Homer Ave., Ashland, Mass.  
 Telechron, Inc.—see Telechron Dept., General Electric Co.  
 Telecom, Inc.—1019 Admiral Bldg., Kansas City 6, Mo.  
 TELECORD—Whitney Blake Co.  
 Telefoto Industries Corp., 35-16 37 St., Long Island City 1 N. Y.  
 TELEFOTAP—Telefoto Industries Corp.  
 TELEDUCT—Whitney Blake Co.  
 TELEFRAME—Whitney Blake Co.  
 TELEMETRON—Tobé Deutschmann Corp.  
 TELEMETROSCOPE—Tobé Deutschmann Corp.  
 TELEMIKE—Miles Reproducer Co., Inc.  
 TELENURSE—Stromberg Time Corp.  
 Telephonics Corp., Park Ave., Huntington, N. Y.  
 TELEPPENE—Whitney Blake Company  
 TELESOPHER—Economy Engineering Co.  
 TELESCOPIC—Kulka Electric Mfg. Co. Inc.  
 TELESFAL—Whitney Blake Co.  
 TELESTEP—Automatic Control Co.  
 TELETALK—Webster Electric Co.  
 TELETHERM—American District Telegraph Co.  
 TELETRON—Airoard Manufacturing Co.  
 Television Clock Corp. of America—see Penwood Numechron Co.  
 Television Hardware Mfg. Co.—see General Cement Mfg. Co.  
 TELEVOLE—Sola Electric Co.  
 TELEVOX—Westinghouse Electric Corp.  
 Telux, Inc., 1433 Eustis St., St. Paul 1, Minnesota  
 TELLERWAITERS—Chelsea Elevator Co.  
 TELSTOR—Fleiden Instrument Div., Robertshaw-Fulton Controls Co.  
 TEMCO—Electric Materials Co.  
 TEMCO—Thermo Electric Manufacturing Co.  
 TEMCOMETER—Thermo Electric Manufacturing Co.  
 TEMFLEX—Irvington Varnish & Insulator Co.  
 TEMP-CHEK—Waco Manufacturing Co.  
 TEMP-R-Tape—Connecticut Hard Rubber Co.  
 TEMPALL—Tobé Deutschmann Corp.  
 TEMPCLAD—Hitemp Wires, Inc.  
 Templeton—Kenly & Co., Gardner Rd., Broadview, Ill.  
 TEMPMASER—Crown Controls Co., Inc.  
 Tempo Products Co., 2075 East 65 St., Cleveland 3, Ohio  
 TEMPOTHERM—General Controls Co.  
 TEMPRENE—Hitemp Wires, Inc.  
 TEMPREX—Electric Corp.  
 TEMPREX—Hitemp Wires, Inc.  
 TEMPRIE—Hitemp Wires, Inc.  
 Temprite Products Corp., E. Maple Rd. (P. O. Box 72 P), Birmingham, Mich.  
 TEMPTUBE—Hitemp Wires, Inc.  
 Tenderizer—Friedrich Refrigerators Inc.  
 TENNA-CLAMP—Mueller Electric Co.  
 TENNA-ROTOR—Alliance Mfg. Co.  
 TENNA-SCOPE—Alliance Mfg. Co.  
 TENNA-TUBE—Acros Corp.  
 TENSILEND—Acros Corp.  
 TENSISLOK—General Cable Corp.  
 TENSION—Swiveller Co., Inc.  
 TENSITE—Driver Co., Wilbur B.  
 Teraido Co., 1068 Raymond Ave., St. Paul 14, Minn.  
 TEREMEND—Buchanan Electrical Products Corp.  
 TERMINAL—National Band & Tag Co.  
 Termite Drills, Inc., 99 North Lotus Ave., Pasadena 8, California  
 TESCO—Eastern Specialty Co.  
 TEST-O-LITE—Brach Manufacturing Corp.  
 TEST SPECIAL—New York Belting & Packing Co.  
 TETCO—Electric Tachometer Corp.  
 TEXAS—Klein & Sons, Mathias  
 Texas Creeting Co., P. O. Box 131, Orange, Tex.  
 TEXCEL—Permacel Tape Corp.  
 TEXDRIVE—Allis-Chalmers Manufacturing Co.  
 TEXTRON—Allis-Chalmers Manufacturing Co.  
 Textite, Inc., 3305 Manor Way, Dallas, Tex.  
 TEXROPE—Allis-Chalmers Manufacturing Co.  
 TEXSLIDE—Allis-Chalmers Manufacturing Co.  
 TEXTSTEEL—Allis-Chalmers Manufacturing Co.  
 TEXTOLITE—General Electric Co., Chemical & Metallurgical Div.  
 TEKWAY—Allis-Chalmers Manufacturing Co.  
 Tey Mfg. Co.—see Maxwell Equipment Co.  
 Theft-Industrial Market Division—see Radio Corp. of America  
 THEATRELITE—Associated Lighting Service  
 Theiler Corp., H. J., Ashmont Ave., Whitinsville, Mass.  
 Thegitt Mfg. Co., Gregg & Hammond Sts., Carnegie, Pa.  
 Ther Electric & Machine Works, Div. of Goldberg & O'Brien Electric Co., 17 S. Jefferson St., Chicago 6, Ill.  
 THER-MONIC—Induction Heating Corp.  
 THERM-A-TAP—Beckley Electric Co., Inc.  
 THERM-O-METER—Simpson Electric Co.  
 THERM-O-TROL—Trindl Products, Ltd.  
 THERMAC—MacArthur Products, Inc.  
 Thermador Electrical Manufacturing Co., 5119 District Blvd., Los Angeles 22, California  
 Thermal Harness Co.—see Revere Corp. of America, Wallingford, Conn.  
 Thermal Syndicate, Ltd., 14 Bixley Heath, Lynbrook, New York  
 THERMALASTIC—Westinghouse Electric Corp.  
 THERMALEZE—Phelps Dodge Copper Products Corp.  
 THERMALITE—Allis-Chalmers Mfg. Co.  
 THERMALL—La Rose & Associates, Inc., W. T.  
 THERMALON—Hitemp Wires, Inc.  
 THERMATROL—Hatfield Wire & Cable Div., Continental Copper and Steel Industries, Inc.  
 THERMATRON—Radio Receptor Co., Inc.  
 THERMAX—General Cable Corp.  
 THERMO-BORD—Carey Mfg. Co., Philip  
 Thermo Electric Manufacturing Co., 465 Huff St., Dubuque, Iowa  
 THERMO-GRIP—Ideal Industries, Inc.  
 THERMO-HUMIDIGRAPH—Bristol Company  
 THERMO-TECTOR—General Electric Co., Apparatus Sales Div.  
 THERMO-TESTER—Airsco Mfg. Co., Inc.  
 THERMO-TIP—Ideal Industries, Inc.  
 THERMO VECTOR—Dunham Co., C. A.  
 THERMO VERTER—Bristol Company  
 Thermobloc Div., Prat-Daniel Corp., 2 Meadow St., South Norwalk, Conn.  
 THERMOFUSE—Kirkman Engineering Corp.  
 THERMOGUARD—Westinghouse Electric Corp.  
 Thermoid Company, Trenton, New Jersey  
 THERMOLAIN—Star Porcelain Co.  
 THERMOLITE—Emeralde Company, Inc.  
 THERMOPHORE—Battle Creek Equipment Co.  
 THERMOPRENE—Whitney Blake Co.  
 ThermoRay Corp., South Buckhout St., Irvington-on-Hudson, N. Y.  
 THERMOSEALER—Wells Mfg. Co.  
 THERMOSTATIC BRAIN—Walf Mfg. Co., P.  
 THERMOSWITCH—Fenwal Inc.  
 THERMOVERTER—Bristol Co.  
 THETA-PLEX—Wakefield Co.  
 Thiel Tool & Engineering Co., Inc., 1417 North Market, St. Louis 6, Missouri  
 THIMBLEYE—Chance Co., A. B.  
 THIN-PANEL—Garden City Plating & Mfg. Co.  
 THINLINE—Mitchell Mfg. Co.  
 3RD WAY—Remington Corp., Remington Air Conditioning Div.  
 THIRTY—Gould-National Batteries, Inc.  
 Thomas Associates, 4607 Alger St., Los Angeles 39, Calif.  
 Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J.  
 Thomas Industries Inc., Moe Light Div., 700 Oak St., Fort Atkinson, Wis.  
 Thomas & Sons Co., R., Lisbon, Ohio  
 Thomson Products Co., 4630 Beverly Dr., Dallas 5, Tex.  
 Thompson, Inc., O., 44-18 Purvis St., Long Island City 1, N. Y.  
 Thompson-Bremer & Co., 520 N. Dearborn St., Chicago 10, Ill.  
 Thompson Clock Co., H. C., 38 Federal St., Bristol, Connecticut  
 Thompson Electric Co., 1101-11 Power Ave., N.E., Cleveland 14, Ohio  
 Thompson Fiber Glass Co., H. I., 1733 Cordova St., Los Angeles 7, Calif.  
 Thompson Mfg. Co., 611 Stevens St., Geneva, Ill.  
 Thompson & Son Co., Henry G., 277 Chapel St., New Haven 5, Connecticut  
 Thomson Industries, Inc., Manhasset, N. Y.  
 Thor Corp., 2115 South 54 Ave., Chicago 50, Illinois  
 Thor Power Tool Co., 175 North State St., Aurora, Illinois  
 Thordarson-Meissner Mfg. Div., Maguire Industries, Inc., Seventh & Belmont Sts., Mt. Carmel, Ill.  
 THOREX—Ohio Brass Co.  
 THORO-FINE—Merck-Korf Gear Co.  
 THOROBRED—Dayton Rubber Co.  
 Thread-Ezy Mfg. Co., Coruna, Mich.  
 Threadwell Tap & Die Co., 16 Arch St., Greenfield, Mass.  
 THRED-O-MATIC—Gaines-Collins Co., Quijada Tool Div.  
 3C—see Clark Controller Co.  
 THREE E—Electrical Engineers Equipment Co.  
 THREE "G"—Gruber Lighting  
 3 HEAT—Waage Manufacturing Co.  
 THREE-U-LITE—Northern Incandescent Lamp Co.  
 THRIFT—Solar Electric Corp.  
 THRIFTEE—Market Electric Products, Inc.  
 THROTTLOR—Minneapolis-Honeywell Regulator Co.  
 THRUSTOR—General Electric Co., Apparatus Sales Div.  
 Thum Co., O. & W.—see Tangitefoot Co.  
 THUNDER-CORE—New England Carbide Tool Co., Inc.  
 THUNDER-TWIST—New England Carbide Tool Co., Inc.  
 THY-MO-TROL—General Electric Co., Apparatus Sales Div.  
 THYRITE—General Electric Co., Apparatus Sales Div.  
 TICKS-OFF—Mine Safety Appliance Co.  
 TIFLIN—Quincy Manufacturing Co.  
 TIGER—Boston Woven Hose & Rubber Co.  
 TIGER-BILT—Tigerman Engineering Co.  
 TIGER BRAND—United States Steel Corp., American Steel & Wire Div.  
 Tigerman Engineering Co., 4332 N. Western Ave., Chicago 18, Ill.  
 Tilden Tool Manufacturing Co., 209 Los Molinos, San Clemente, California  
 TIMBERHOG—Reed-Prentice Corp.  
 TIME-ALL—International Register Co.  
 TIME-MINDER—International Register Co.  
 TIME-O-STAT—Minneapolis-Honeywell Regulator Co.  
 TIME-O-SWITCH—Minneapolis-Honeywell Regulator Co.  
 TIME SPOT—Tork Clock Co., Inc.  
 Tinnerman Products Inc., P. O. Box 6688, Dept. 16, Cleveland 1, Ohio  
 TINOL—American Solder & Flux Co.  
 TINY CHIEF—Cornell-Dubilier Electric Corp.  
 TINY-GLOW—Industrial Devices, Inc.  
 TIP-TOP—General Cable Corp.  
 TIREX—Simplic Wire & Cable Co.  
 TITAN—Detroit Hoist & Machine Co.  
 Titan Mfg. Co., Inc., 701 Seneca St., Buffalo 10, N. Y.  
 Tiltchener & Co., E. H., 67 Clinton St., Binghamton, N. Y.  
 TITE-BIND—Thomas & Betts Co.  
 TITE-BITE—Thomas & Betts Co.  
 TITE-GRIP—Shippert Mfg. Co.  
 TITIBILT—Phelps Dodge Copper Products Corp.  
 Titeflex, Inc., Great Western Fuse Div., 500 Frelinghuyzen Ave., Newark 5, New Jersey  
 TITRILOG—Consolidated Engineering Corp.  
 Toast-O-Lator Co., Inc., 10-23 Jackson Ave., Long Island City 1, New York  
 Tobé Deutschmann Corp., Providence Highway, Norwood, Mass.  
 TOBEMITE—Tobé Deutschmann Corp.  
 Tocco Div., Ohio Crankshaft Co., 3000 Harvard Ave., Cleveland 1, Ohio  
 Todd Products Co., Inc., 156 Gramatan Ave., Mount Vernon, N. Y.  
 Todd Transformer Corp.—see Todd Products Co., Inc.  
 TOGGLEBUG—Guilbert Steel Co.  
 Toledo Commutator Co., 1111 Beecher St., Owosso, Michigan  
 Toledo Pipe Threading Machine Co., 1445 Summit St., Toledo 4, Ohio  
 Toledo Standard Commutator Co.—see Toledo Commutator Co.  
 TOM THUMB—Fulton Manufacturing Corp.  
 TOM THUMB—Oster Mfg. Co.  
 TOMAHAWK—Stevens Walden Inc.  
 Tomic Sales & Engineering Co., 20000 Sherwood Ave., Detroit 34, Mich.  
 Ton-Tex Corp., 247 Pearl St. N. W., Grand Rapids 2, Michigan  
 TONEPAK—Lee Electric, Inc.  
 TONETEX—Electro-Voice Inc.  
 TONG—Curtis Lighting, Inc.  
 TONG-TEST—Columbia Mfg. Co.  
 TONGWELD—Lincoln Electric Co.  
 TOOL-ARC—Alloy Rods Company  
 TOOL-O-METER—New Jersey Meter Co.  
 TOOLWELD—Lincoln Electric Co.  
 TOOTS-E—Lovsted & Co., Inc., C. M.  
 TOP-LAY—Metals & Controls Corp.  
 Toplight Tape Co., Div. of Toplight Tool Co., Inc., 160 E. 9th Ave., York, Pa.  
 TOPHBESTOS—Driver Co., Wilbur B.  
 TOPHET—Driver Co., Wilbur B.  
 TOPLITES—Swiveller Co., Inc.  
 TOPNOTCH—Day-Brite Lighting, Inc.  
 TOPPER—Hubbell, Inc., Harvey  
 TORCH-O-MATIC—Velocity Power Tool Co.  
 Torit Manufacturing Co., 292 Walnut St., St. Paul 2, Minnesota  
 Tor Clock Co., Inc., 1 Grove St., Mount Vernon, New York  
 TIRKOL—Line Material Co.  
 Tork-Master Div., Harvill Corp., 7251 W. Century Blvd., Los Angeles 45, Calif.  
 TORKMASTER—Tork Clock Co., Inc.  
 TORNADO—Breuer Electric Mfg. Co.  
 TORPEDO—Swiveller Co., Inc.  
 TORRIDOR—Trane Co.  
 Torrington Co., 59 Field St., Torrington, Conn.  
 TORVIC—Victor Products Corp.  
 TOTALUME—Wilbur & Williams Co.  
 TOTRUST—Wilbur & Williams Co.  
 Touch-Plate Mfg. Corp., 16530 Garfield, Paramount, Calif.  
 Tower Craftsman Inc., 105 Chestnut St., Red Bank, N. J.  
 Townmotor Sales & Service, Inc., Subsidiary of Townmotor Corp., 2940 E. 96 St., Chicago 17, Ill.  
 TOY LIGHT—Aerolux Lights Corp.  
 TRA-BAK—Great Northern Mfg. Co.  
 TRACTOR OX—Barrett-Cravens Co.  
 Trade Service Publications, Inc., 673 N. Wells St., Chicago 10, Ill.  
 Trade-Wind Motors, Inc., 7755 Paramount Blvd., Rivera, Calif.  
 TRADELITER—Duro-Tect Corp.  
 TRADEMASTER—Crown Controls Co., Inc.  
 TRAFFLEX—Crouse-Hinds Co.  
 TRAMRAIL—Cleveland Crane & Engineering Co.  
 TRANCEL—Johns-Manville  
 Trane Company, Third & Cameron Aves., La Crosse, Wisconsin  
 TRANOLSEAL—Johns-Manville  
 TRANS-CO—Coil Company of America, Inc.  
 Transformer Engineers, 161 E. California St., Pasadena, Calif.  
 Transformers, Inc., 532 North St., Endicott, N. Y.  
 TRANSIMAG—Magnetic Amplifiers, Inc.  
 TRANSITE—Johns-Manville  
 TRANSPORTER—Automatic Transportation Co.  
 TRANSDRIDER—Automatic Transportation Co.  
 TRANSTACKER—Automatic Transportation Co.  
 TRANSTRACOR—Automatic Transportation Co.  
 TRANSVERTER—Hertner Electric Co.  
 TRANSVEYOR—Automatic Transportation Co.  
 TRAP-DRI—A-P Controls Corp.  
 TRAPIT—A-P Controls Corp.  
 TRAV-ELECTRIC—Teraido Co.  
 TREE KING—Maxwell Equipment Co.  
 TREE PLEX—Rome Cable Corp.  
 TRENCHLAY—General Cable Corp.  
 TRI CEPTOR—Alliance Mfg. Co.  
 TRI-CLAD—General Electric Co., Apparatus Sales Div.  
 TRI-CORE—Alpha Metals, Inc.  
 TRI-FLUX—Redmond Co., Inc.  
 Tri-Part Mfg. Co., 934 Plum St., Detroit 1, Mich.  
 TRI-PHOON—Le John Manufacturing Co.



## COMPANY AND TRADE NAME DIRECTORY

TRI-PLEX—Sta-Warm Electric Co.  
Tri-Saw Corp., 2207 Hanley Industrial Ct., St. Louis 17, Mo.\*  
TRI-SNAP—Westinghouse Electric Corp.  
TRI-TEMP—Diamond Saw Works, Inc.  
TRIAD—Nye Tool Co.  
TRIANGLE—Epo Electronics, Inc.  
Triangle Conduit & Cable Co., Inc., Triangle & Jersey Aves., New Brunswick, New Jersey  
Triangle Equipment Co., Inc., 45 River Rd., Nutley 10, New Jersey  
Triangle Instruments Co.—see Epo Electronics Inc.  
Trico Fuse Manufacturing Co., 2948 North Fifth St., Milwaukee 10, Wisconsin  
TRIG—Triangle Conduit & Cable Co. Inc.  
TRIG—Rostan Corporation  
TRIG-R-HEAT—Wall Manufacturing Co., P.  
TRIG TOWERS—Rostan Corp.  
TRILITE—Artistic Lamp Mfg. Co., Inc.  
TRILOK—Pelham Electric Mfg. Corp.  
TRIM-R—Bourns Laboratories, Instrument Sales Corp.  
TRIMMASTER—Brittan & Co., Inc., E. F.  
Trimount Instrument Co., 3119 W. Lake St., Chicago 12, Ill.  
TRIMPOT—Bourns Laboratories, Instrument Sales Corp.  
Trinid Products, Ltd., 1807-11 S. Clark St., Chicago 16, Ill.  
Trine Mfg. Corp., 1430 Ferris Pl., N. Y. 62, N. Y.  
TRIOFLEX—Thermoid Co.  
TRION—Chase-Shawmut Co.  
Trion Inc., 1000 Island Ave., McKees Rocks, Pa.  
TRIONIC—Chase-Shawmut Co.  
TRIONET—Chase-Shawmut Co.  
TRIONIZED AIR—Trion Inc.  
TRIOPRENE—Triangle Conduit & Cable Co. Inc.  
TRIOSEAL—Triangle Conduit & Cable Co. Inc.  
TRIOZONE—Triangle Conduit & Cable Co. Inc.  
TRIPL-X-TAP—Dossert Mfg. Corp.  
Triple A Battery Co.—see Hobbs Battery Co.  
Triple-A Specialty Co., 2101 Walnut St., Chicago 12, Ill.  
Triplet Electrical Instrument Co., Harmon Rd., Bluffton, Ohio  
TRIPLE—Chance Co., A. B.  
TRIPLOC—Pyle National Co.  
TRIPLOX—Nemco Electric Co.  
Trilon Mfg. Co., Inc., East Haddam, Conn.  
TRIWAY—U. S. Expansion Bolt Co.  
TROJAN—Detroit Holst & Machine Co.  
TROJAN—Hexacon Electric Co.  
TROJAN—Parker Mfg. Co.  
TROL-E-DUCT—Bulldog Electric Products Co.  
Trombetta Solenoid Corp., 329 North Milwaukee St., Milwaukee 2, Wisconsin  
TROPHY—Sun Kraft Health Products, Inc.  
TROPIC-HEAT—Pan-American Electronics Co.  
TROPCAPS—Micamold Radio Corp.  
Trotter & Co., E. T., 594 Johnson Ave., Brooklyn 37, New York  
TROUBLE SAVER—Patent Scaffolding Co., Inc.  
TRU-FLANGE—American Brass Co.  
TRU-SET—Olin Industries, Inc., Ramset Div.  
TRU-SONIC—Stephens Mfg. Corp.  
TRU-TORK—Nankens Co., Geo. L.  
TRU-WHITE—Duro-Test Corp.  
TRUARC—Capewell Mfg. Co.  
TRUCO—Wheel Truening Tool Co.  
TRUCOLITE—Guth Company, Edwin F.  
TRUFLEX—Capewell Mfg. Co.  
TRUFLEX—Metals & Controls Corp.  
TRULITES—Molded Insulation Company  
Trumbull Components Dept., General Electric Co., 41 Woodford Ave., Plainville, Conn.  
Trumbull Electric Dept.—see Trumbull Components Dept., General Electric Co.  
Trumbull Electric Mfg. Co.—see Trumbull Components Dept., General Electric Co.  
TRUMBULLITE—General Electric Co.  
Truscon Steel Div., Republic Steel Corp., Albert St., Youngstown 1, Ohio  
TUBELET—Thomas & Betts Co.  
TUBELOX—Patent Scaffolding Co., Inc.  
TUBENDERS—Henderson Electric Co.  
TUBEWELD—Electric Tube Products  
TUCALL—Edwards Co., Inc.  
TUF-FACE—Matthews & Co., James H.  
TUF-FLEX—Millers Falls Co.  
TUFF-DRY—Central Paint & Varnish Works Inc.  
TUFF 'N RUFF—Miller Products Bolt Co.  
TUFFERNELL—Westinghouse Electric Corp.  
TUG—Mercury Manufacturing Co.  
TUGGER—Clark Equipment Co.  
TULAMP—General Electric Co., Apparatus Sales Div.  
Tulsa Winch Div., Vickers, Inc., 815 E. First St., Tulsa 3, Okla.\*  
TUMB-L-TITE—U. S. Expansion Bolt Co.  
TUMBLAST—American Wheelabrator & Equipment Corp.  
TUMBLIN—Star Expansion Bolt Co.  
TUMICO—Doall Co.  
TUMS—Hykon Mfg. Co.  
TUNGAR—General Electric Co., Apparatus Sales Div.  
TUR-A-TOP—Day Brite Lighting, Inc.  
TURBINATOR—Martin Brothers Electric Co.  
TURBO—Brand & Co., Inc., William  
TURBO—Brand Dielectrics, Inc.  
TURBO-COMPRESSORS—Spencer Turbine Co.  
TURBO-JET—Allis-Chalmers Manufacturing Co.  
TURBO-RUPTOR—Allis-Chalmers Manufacturing Co.  
TURBOGLAS—Brand & Co., Inc., William  
TURBOLAC—Brand & Co., Inc., William  
TURBOLENE—Brand & Co., Inc., William  
TURBOLEX—Brand & Co., Inc., William  
TURBOSIL—Brand & Co., Inc., William  
TURBOTHERM—Brand & Co., Inc., William  
TURBOTRANS—Brand & Co., Inc., William  
TURBOTUF—Brand & Co., Inc., William  
TURBOVANE—Westinghouse Electric Corp.

TURBOZONE—Brand & Co., Inc., William  
Turco Products, Inc., 6135 S. Central Ave., Los Angeles 1, Calif.  
TURCO-SOLV—Turco Products, Inc.  
TURN-TYTE—Rodale Mfg. Co., Inc.  
Turner Company, 909-17 St., N. E., Cedar Rapids, Iowa  
Turner Brass Works, 821 Park Ave., Sycamore, Illinois  
TURNEX—Woodhead Co., Daniel  
TURNLOK—Pass & Seymour, Inc.  
TURNLOX—Benjamin Electric Mfg. Co.  
TURQUOISE—Duro-Test Corp.  
TURRET—General Electric Co., Construction Materials Div.  
TURRET TRUCKS—Hyster Co.  
Tuttle & Kift, Inc., 1823 North Monitor St., Chicago 39, Illinois  
20 CENTURY—Roller Bearing Company of America  
TWIN-LINE—Glatthar Lighting Co.  
TWIN-LUG—Blackburn Corp., Jasper  
TWIN-SIX—Burgess Battery Company  
TWIN-WELD—Hewitt-Robins, Inc.  
TWINWEY—Chance Co., A. B.  
TWINMASTER—Welch Co., W. W.  
TWINPOT—Bourns Laboratories, Instrument Sales Corp.  
TWINSET—Telex, Inc.  
TWINSTATION—United States Rubber Co.  
TWIST—Edwards Co., Inc.  
TWIST-LOCK—Hubbell Inc. Harvey  
TWIST-MOUNT—Pyramid Electric Co.  
TWIST-TITE—Hubbell Inc., Harvey  
TWO-TIMER—Vocaline Co. of America, Inc.  
TYMANDATER—Cincinnati Time Recorder Co.  
TYNEE-DRY—Pyramid Electric Co.  
Typhoon Air Conditioning Co., Inc., 505 Carroll St., Brooklyn 15, N. Y.  
Tyson Bearing Corp., Massillon, Ohio  
TYTEX—Exide Industrial Div., Electric Storage Battery Co.

## U

UCD—Chelsea Elevator Co.  
U-C-Lite Manufacturing Co., 1050 West Hubbard St., Chicago 22, Illinois  
U-RE-LITE—I-T-E Circuit Breaker Co.  
U. S.—see United States  
U.S.E.—U. S. Expansion Bolt Co.  
USG—U. S. Gauge Div., American Machine & Metals, Inc.  
USG—United States Graphite Co.  
USMC—United Shoe Machinery Corp.  
U-W—Upson-Walton Co.  
UTC—United Transformer Co.  
UBOLET—Spedon Pipe Clamp Co.  
UCILON—United Chromium, Inc.  
Ulanet Company, George, 413-415 Market St., Newark 5, New Jersey  
ULTRA-AIRE—Mine Safety Appliances Co.  
ULTRA LENS—Montgomery Tool Co.  
Ultra-Violet Products, Inc., 145 Pasadena Ave., South Pasadena, Calif.  
Ultra Violet Ray Labs., Inc., 100 Fifth Ave., New York 11, N. Y.  
ULTRATUBE—Plastoid Corp.  
ULTRAVERTER—Blonder-Tongue Laboratories, Inc.  
UNADCO—United Advertising Corp., United Mfg. Co. Div.  
UNAFLOW—Skinner Engine Company  
UNARCO—Union Asbestos & Rubber Co.  
UNDARK—United States Radium Corp.  
Underwood Corp., H. B., 1015-1025 Hamilton St., Philadelphia 23, Pa.  
UNI-BALLAST—Line Material Co.  
UNI-BUS—Roller-Smith Corp.  
UNI-CLIP—Unistrut Products Co.  
UNI-CRIMP—Sherman Mfg. Co., H. B.  
UNI-FLOW—Mitchell Manufacturing Co.  
UNI-GLOW—Miskella Infra-Red Co.  
UNI-PACT—Sperli Faray Inc.  
UNI-TRAN—Miller Electric Mfg. Co.  
UNIBESTOS—Union Asbestos & Rubber Co.  
UNICHROME—United Chromium, Inc.  
UNICLAMP—Chance Co., A. B.  
UNICLOSED—U. S. Electrical Motors Inc.  
UNIDYNE—Shure Brothers, Inc.  
Uniflow Mfg. Co., Erie, Pa.  
Uniform Tubes Inc., Level Rd., Collegeville 2, Pa.  
UNILARM—Russell & Stoll Company, Inc.  
UNILETS—Appleton Electric Co.  
UNILINE—Pass & Seymour, Inc.  
Unimatic Corp., Sherwood Lane, Caldwell Township, N. J.  
Unimax Switch Div., W. L. Maxson Corp., 460 W. 34 St., N. Y. 1, N. Y.  
UNION—Jeffers Electric Co.  
UNION—Multi Electric Mfg. Co.  
Union Asbestos & Rubber Co., 332 S. Michigan Ave., Chicago 4, Ill.  
Union Carbide and Carbon Corp.—see Linde Air Products Co.  
Union Insulating Co., Box 351, Parkersburg, West Virginia  
Union Metal Manufacturing Co., 1432 Maple Ave., N. E., Canton 5, Ohio  
Union Plate & Wire Co., D. E. Makepeace Co. Div., Dunham & Pine Sts., Attleboro, Massachusetts  
Union Tool Co., 48 E. River St., Orange, Mass.  
UNIONMELT—Linde Air Products Co.  
UNIPPOINT—Shure Brothers, Inc.  
UNIPRENE—General Cable Corp.  
UNIRACK—Alden Products Co.  
UNISEAL—Johns-Manville  
UNISHEAR—Stanley Electric Tools  
UNISPEED—Stromberg Time Corp.  
Unistrut Products Co., 1013 West Washington Blvd., Chicago 7, Illinois  
UNIT BREAKER—Cutler-Hammer, Inc.

UNIT-VERSAL—Bulldog Electric Products Co.  
UNITAIRE—Westinghouse Electric Corp., Sturtevant Div.  
UNITE-A-LITE—Moe-Bridges Corp.  
United Advertising Corp., United Mfg. Co. Div., 41 Haig St., Hamden 14, Conn.  
United Blower Co., Inc., 193 Centre St., N. Y. 13, N. Y.  
United Chromium, Inc., 100 E. 42 St., N. Y. 17, N. Y.  
United Cinephone Corp.—see Ripley Co., Inc.  
United Drill and Tool Corp., Whitman & Barnes Div., 40600 Plymouth Rd., Plymouth, Mich.  
United Electric Controls Co., 85 Schools St., Watertown 72, Massachusetts  
United Electric Machinery Co., 1824 N. 72 St., Elmwood Park, Ill.  
United Electric Motor Co., 178 Centre St., New York 13, New York  
United Mfg. Co., Div. of United Advertising Corp., 41 Haig St., Hamden 14, Conn.  
United Metal Box Co., Inc., 168 Seventh St., Brooklyn 15, N. Y.  
United Metal Cabinet Corp., 168-186 Seventh St., Brooklyn 15, N. Y.  
United Pressed Products Co., 741 West Harrison St., Chicago 7, Illinois  
United Refrigerator Co., Locust & Walnut Sts., Hudson, Wisconsin  
United Screw and Bolt Corp., 2513 W. Cullerton St., Chicago 8, Ill.\*  
United States Air Conditioning Corp., Como Ave. S. E. at 33rd, Minneapolis 41, Minn.  
United States Electric Mfg. Corp., 222 W. 14 St., N. Y. 11, N. Y.\*  
U. S. Electrical Motors Inc., 200 East Slauson Ave., Los Angeles 54, California  
United States Electrical Tool Co., 3640 Llewellyn St., Cincinnati, Ohio\*  
United States Electronics Corp., 275 Warren St., Lyndhurst, N. J.  
U. S. Expansion Bolt Co., State St. & Pennsylvania Railroad, York, Pennsylvania  
United States Gasnet Co., Fluorocarbon Products Div., 602 N. 10 St. (P. O. Box 93), Camden 1, N. J.\*  
U. S. Gauge Div., American Machine & Metals, Inc., Clymer Ave., Sellersville, Pa.  
United States Graphite Co., Div. of Wickes Corp., 1621 Holland Ave., Saginaw, Mich.\*  
U. S. JUNIOR—Trine Mfg. Corp.  
U. S. KEM-BLO—United States Rubber Co.  
U. S. Mica Co., Inc., Jordan & Van Dyke Sts., East Rutherford, N. J.  
United States Motors Corp., 420 Nebraska St., Oshkosh, Wis.\*  
U. S. PEERLESS—United States Rubber Co.  
United States Radium Corp., 535 Pearl St., New York 7, New York  
U. S. REVERE—United States Rubber Co.  
United States Rubber Co., Electrical Wire and Cable Dept., 1230 Avenue of the Americas, New York 20, N. Y.  
United States Rubber Co., Mechanical Goods Div., 1230 Avenue of the Americas, New York 20, N. Y.  
U. S. SENIOR—Trine Mfg. Corp.  
United States Steel Corp., American Steel & Wire Div., Rockefeller Bldg., Cleveland 13, Ohio  
U. S. Wire & Cable Corp., Progress & Monroe Sts., Union, N. J.  
United Transformer Co., 150 Varick St., N. Y. 13, N. Y.  
United Wire & Supply Corp., 1497 Elmwood Ave., Providence 7, Rhode Island  
UNITOP—Allis-Chalmers Manufacturing Co.  
UNITRANE—Trane Company  
UNITRIP—Stromberg Time Corp.  
UNITROL—Cutler-Hammer, Inc.  
Unity Mfg. Co., 2909 S. Indiana Ave., Chicago 16, Ill.  
UNITYPE—Superior Appliance Co.  
UNIVERSAL—Brush Electronics Co.  
UNIVERSAL—Hosfeld Mfg. Co.  
UNIVERSAL—Landers, Frary & Clark  
UNIVERSAL—Mueller Electric Co.  
Universal Electric Co., 300 East Main St., Owosso, Michigan  
Universal Electric Stage Lighting Co., Inc.—see Kliegl Bros.  
Universal Gear Corp., 1452 East 19th St., Indianapolis 7, Indiana\*  
Universal Major Elec. Appliance Co., Box 119, Lima, Ohio\*  
Universal Mfg. Corp., 29-51 E. 6th St., Paterson, N. J.  
Universal Welder Corp., 2557 E. 79 St., Cleveland 4, Ohio  
Universal Winding Co., P. O. Box 1605, Providence 1, Rhode Island  
UP-N-DOWN—General Lamps Mfg. Corp.  
Up-Right, Inc., Up-Right Scaffolds Div., 1013 Pardee St., Berkeley 10, Calif.\*  
UPLIFTER—Revolver Company  
UPPCO—United Pressed Products Co.  
UPS-A-DAISY—Gibson Refrigerator Co.  
Upson-Walton Co., 12500 Elmwood Ave., Cleveland 11, Ohio\*  
Uptegraf Mfg. Co., R. E., P. O. Box 182, Scottsdale, Pa.  
Urell, Inc., 43 Main St., Bradford, Pa.  
URNA—Curtis Lighting, Inc.  
U. S.—see United States  
USAIRCO—United States Air Conditioning Corp.  
USALITE—United States Electric Mfg. Corp.  
USCOLITE—United States Rubber Co.  
USCOLOID—United States Rubber Co.  
USEX—United States Rubber Co.  
USKON—United States Rubber Co.  
USKORONA—United States Rubber Co.  
UTAH—Boston Woven Hose & Rubber Co.  
Utica Drop Forge & Tool Corp., Utica 4, N. Y.

JTIL-A-TOOL—Templeton, Kenly & Co.  
 UTILISCOPE—Diamond Power Specialty Corp.  
 UTILITE—Stieber Mfg. Co.  
 Utilities Safety Supply Co. Inc., 3112 Indiana Ave., Kansas City 3, Missouri  
 Utilities Service Co., 1 Pine St., Allentown, Pa.  
 UTILITRUC—Clark Equipment Co.  
 UTILITY—Blair & Decker Mfg. Co.  
 UTILITY—Thermoid Co.  
 Utility Body Co., 1530 Wood St., Oakland 7, Calif.\*  
 Utility Electric Co.—see Toastwell Company  
 Utility Service Co. Inc., Box 102 Racine, Wis.\*  
 UTILVUE—Diamond Power Specialty Corp.  
 UVILUX—Burton Mfg. Co.

## V

V-BEAM—Duro-Test Corp.  
 V-C-U—Guth Co., Edwin F.  
 V-FLAT—Cincinnati Tool Co.  
 V.1.2—Molded Insulation Company  
 V & S—Reliance Electric & Engineering Co.  
 V-3—Battle Creek Equipment Co.  
 VAC-IT—Doyle Vacuum Cleaner Co.  
 VAC-TITE—Hermetic Seal Products Co.  
 VACGRUV—Vaco Products Co.  
 Vaco Products Co., 317 E. Ontario St., Chicago 11, Ill.  
 VACOMBO—Vaco Products Co.  
 VACU-BREAK—BuildDog Electric Products Co.  
 Vacuum Cleaner Corp. of America, Cordomatic Div., 1724 W. Indiana Ave., Phila. 32, Pa.  
 VACUUM-GRIP—Snap-on Tools Corp.  
 VACUUMSTAT—Minneapolis-Honeywell Regulator Co.  
 VAGABOND—Shure Brothers, Inc.  
 VALIMOTOR—Electric Controller & Mfg. Co.  
 Valley Electric Corp., 4221 Forest Park Blvd., St. Louis 8, Mo.\*  
 Valley Fan Mfg. Co., Box 206, Fort Valley, Ga.  
 Valley Welding & Boiler Co.—see Calcinator Corp.  
 VALUEBILT—Heatrice, Inc.  
 VALV-AMP—General Electric Co., Apparatus Sales Div.  
 VALVRATOR—Fischer & Porter Co.  
 Van Clee Bros. Inc. Div. of Johns-Manville, 7800 S. Woodlawn Ave., Chicago 19, Ill.  
 Van Dorn Electric Tool Co.—see Black & Decker Mfg. Co.  
 Van Dyke Industries—see General Lamps Mfg. Corp.  
 Vanadium Tool Co., Box 322, Athens, Ohio  
 Vanderman Mfg. Co., Mansfield Ave., Williamstown, Conn.  
 VANITEX—Van Clee Bros., Inc.  
 VANO—Copous Engineering Corp.  
 VAP DIL—Simpson Electric Co.  
 VAPOR TIGHT—Benjamin Electric Mfg. Co.  
 VAPORSTAT—Minneapolis-Honeywell Regulator Corp.  
 VAPROTEX—Woodhead Co., Daniel  
 VAR 'A' CONE—Gerbing Mfg. Corp.  
 Varflex Corp., 506 W. Court St., Rome, N. Y.\*  
 Varflex Sales Co., Inc.—see Varflex Corp.  
 VARFLO—Varflex Corp.  
 VARGLAS—Varflex Corp.  
 VARI-AMP—Allis-Chalmers Mfg. Co.  
 VARI-FEED—Trico Fuse Mfg. Co.  
 VARI-FLOW—Dunham Co., C. A.  
 VARI-HOT—Snape-on Tools Corp.  
 VARI-PITCH—Allis-Chalmers Manufacturing Co.  
 VARI-SPEED—Reeves Pulley Co. Inc.  
 VARI-SPOT—Curtis Lighting, Inc.  
 VARI-TEMP—Dunham Co., C. A.  
 VARI-VAC—Dunham Co., C. A.  
 VARIAC—General Radio Company  
 VARIATOR—Cleveland Worm & Gear Co.  
 VARICELL—Superior Electric Co.  
 VARIDOT—Simpson Electric Co.  
 VARIDRIVE—U. S. Electrical Motors Inc.  
 VARIOFORM—Lighting Products, Inc.  
 VARIJET—Flint & Walling Mfg. Co., Inc.  
 VARIJUST—Anton Electronic Laboratories Inc.  
 VARIPELL—West Instruments Corp.  
 VARILITE—Verd-A-Ray Corp.  
 Varnum Door-Engine Co., 1459 Venice Blvd., Los Angeles 6, Calif.\*  
 Vero Mfg. Co., Inc., 1801 Walnut St., Garland, Tex.  
 VARPAP—Tobe Deutschland Corp.  
 VARSITY—Benjamin Electric Mfg. Co.  
 VARY-TALLY—Veeder-Root, Inc.  
 VASCO—Mitchell Industries, Inc.  
 VAULTMASTER—Haertel Co., Walter  
 VE-E-ZY—Ton-Tex Corp.  
 Veeder-Root, Inc., 70 Sargeant St., Hartford, Conn.  
 VEEDRUM—Art Metal Co.  
 VEELITE—Battle Creek Equipment Co.  
 VEGMART—Fogel Refrigerator Co.  
 Velocity Power Tool Co., 201 N. Braddock Ave., Pittsburgh 8, Pa.  
 VELOMETER—Illinois Testing Laboratories, Inc.  
 VELVET—McKay Chemical Co., Inc.  
 VELVETONA—Central Paint & Varnish Works Inc.  
 VELVITAN—Graton & Knight Co.  
 Vermaline Products Co., P. O. Box 222, Hawthorne, N. J.  
 VENTA-MINE—Guyan Machinery Co., Inc.  
 VENTAIR—Coppus Electric Engineering Corp.  
 VENTILETTE—Diehl Manufacturing Co.  
 VENTILIER—Active Specialty Corp.  
 VENTISEL—Electronic Devices, Inc.  
 VENTROLA—National Appliance Co.  
 VENTURA—American Blower Corp.  
 VENTURAFIN—American Blower Corp.  
 Venus Products Co., 6627 S. Ashland Ave., Chicago 36, Ill.  
 VERD-A-LITE—Verd-A-Ray Corp.  
 Verd-A-Ray Corp., 615 Front St., Toledo 5, Ohio  
 VERDEX—Verd-A-Ray Corp.  
 VERI-TELL—Taco West Corp.  
 VERIBEST—Snyder & Son, Inc., M. L.  
 Verplex Co., 100 Middlesex Turnpike, Essex 3, Conn.  
 VERSA—Versen Company, Kurt

VERSA-TOOL—Phillips Manufacturing Co. Inc.  
 Versabar Corp., 517 Communipaw Ave., Jersey City 6, N. J.  
 Versabar Div., M-H Standard Co.—see Versabar Corp.  
 VERSAFLEX—Thermoid Co.  
 VERSAL—Versen Company, Kurt  
 VERSALINER—Peck & Harvey Mfg. Corp.  
 VERSATIL—Versen Company, Kurt  
 VERSATOL—General Electric Co., Construction Materials Div.  
 VERSATOL—Shelton Plane & Tool Mfg. Co.  
 VERSATROL—Assembly Products, Inc.  
 VERSATRY—Versen Company, Kurt  
 VERSATU—Versen Company, Kurt  
 Versen Co., Kurt, Englewood, N. J.  
 VERSICON—Thermoid Co.  
 VERSIL—Versen Company, Kurt  
 VERSILIER—Keystone Electric Mfg. Co.  
 VERSTAP—Burndy Engineering Company, Inc.  
 VERSTRUM—Versen Co., Kurt  
 VERTICOL—Art Metal Co.  
 VERTOLITE—Line Material Co.  
 VI-TITE—Penn-Union Electric Corp.  
 Viber Co., 726 S. Flower St., Burbank, Calif.  
 VIBERLEC—Viber Co.  
 VIBRA-FLOW—Syntrol Co.  
 VIBRACODE—Motorola, Inc.  
 VIBRASHOCK—Robinson Aviation, Inc.  
 VIBREX—Saussee & Co., M. W.  
 VIBRO—Burgess Engine Crafters  
 VIBRO-CENTRIC—Black & Decker Mfg. Co.  
 VIBROGROUND—Associated Research Inc.  
 Vibroscope Co., Route 28, Near Kingston (P. O. Box 97), Glenford, N. Y.  
 VIBROTEST—Associated Research Inc.  
 Vickers, Inc., Tulsa Winch Div., 815 E. First St., Tulsa 3, Okla.  
 Vickers Electric Div., Vickers Inc., 1847 Locust St., St. Louis 3, Mo.  
 VICTOR—Ludlow Manufacturing & Sales Co.  
 VICTOR—Smith & Sons Corp., James H.  
 Victor Instrument Mfg. Co. Inc., 33 W. 60 St., N. Y. 23, N. Y.  
 Victor Insulators Div., I-T-E Circuit Breaker Co., Victor, N. Y.  
 Victor Insulators, Inc.—see Victor Insulators Div.  
 VICTOR JR.—Trime Mfg. Corp.  
 Victor Products Corp., 901 Pope Ave., Hagerstown, Md.  
 Victor Saw Works, Inc.—see Clemson Bros., Inc.  
 Victor Specialties, 775 Main St., New Rochelle, N. Y.  
 VICTOR SR.—Trime Mfg. Corp.  
 Victor Ventilator Co., 320 South Wayne Ave., Lockland, Cincinnati 15, Ohio\*  
 Victor X-Ray Corporation—see General Electric Co., X-Ray Dept.  
 Victory Metal Mfg. Corp., 200 W. Germantown Pike, Plymouth Meeting, Pa.  
 VICTRON—Victor Ventilator Co.  
 VIDRIO—Dorby Co.  
 VIKING—Forsberg Manufacturing Co.  
 VIKING—Progressive Welder Sales Co.  
 Viking Air Conditioning Div., National U. S. Radiator Corp., 5601 Walworth Ave., Cleveland 2, Ohio  
 Viking Copper Tube Co., 16700 St. Clair Ave., Cleveland 10, Ohio  
 Viking Instruments Inc., East Haddam, Conn.  
 VIMCO—Victory Medal Mfg. Corp.  
 Vimco Mfg. Co., Inc., 105 Brayton St., Buffalo 13, N. Y.  
 VINCOLIGHTS—Vimco Mfg. Co., Inc.  
 VINSOL—Rusgreen Mfg. Co.  
 Virden Co., John C., 5009-6103 Longfellow Ave., Cleveland 3, Ohio  
 VIS-A-RAY—Dura-Test Corp.  
 VIS-A-GLOW—Brack Mfg. Corp.  
 VIS-O-MATIC—Co-Operative Utilities Co. Inc.  
 VISE-GRIP—Petersen Manufacturing Co., Inc.  
 VISGAGE—Eitzen Co., Louis C.  
 VISI-GARD—Guyan Machinery Co., Inc.  
 Vision Aids, Inc.—see Silvery Lighting, Inc.  
 VISIONAIRE—Sunbeam Lighting Co.  
 VISUALIER—Garden City Plating & Mfg. Co.  
 VISULARM—Crouse-Hinds Co.  
 VISULITE—Keystone Electronics Corp.  
 VITALITE—Adjustable Fixture Co.  
 VITALLOY—Billings & Spencer Co.  
 VITREOSIL—Thermal Syndicate, Ltd.  
 VITROHM—Ward Leonard Electric Co.  
 VITROLAIN—Star Porcelain Co.  
 VITRON—L. O. F. Glass Fibers Inc.  
 VITRONANEL—Anaconda Wire & Cable Co.  
 VITROTEX—Anaconda Wire & Cable Co.  
 VIXEN—Heller Brothers Co.  
 VIZ-AID—Day-Brite Lighting, Inc.  
 Vechek Tool Co., 3001 E. 87 St., Cleveland 4, Ohio  
 Vocaline Co. of America, Inc., Bristol Motor Div., Coulter St., Old Saybrook, Conn.  
 VOCATRON—Bristol Motor Div., Vocaline Co. of America, Inc.  
 VOGELITE—Ultra-Violet Products, Inc.  
 Vogt Machine Co., Henry, 1000 W. Ormsby St., Louisville 10, Ky.  
 VOGUE-LITE—Swiveller Co., Inc.  
 Voigt Co., 1636 N. Carlisle St., Phila. 21, Pa.  
 VOKALCALL—Auth Electric Company, Inc.  
 VOLT—Elgo Shutter & Mfg. Co.  
 VOLTAPE—Respro Inc.  
 Voltarc Tubes, Inc., 44 Cross St., Norwalk, Conn.  
 VOLTBOX—Superior Electric Co.  
 VOLTINE—Waveland Electric Co.  
 VORNADO—Sutton Corp., O. A.  
 VU-ALL—Cable Electric Products, Inc.  
 VULCAN—Illinois Iron & Bolt Co.  
 VULCAN—Paranite Wire & Cable Div., Essex Wire Corp.  
 VULCAN—Williams & Company, J. H.  
 Vulcan Electric Co., Div. of Consolidated Electric Lamp Co., 88 Holden St., Danvers, Mass.

VULCAPRENE—Paranite Wire & Cable Div., Essex Wire Corp.

## W

WB—Ware Fuse Corp.  
 W.G.R.—Roller, Inc., Wm. G.  
 WR—Workrite Mfg. Co.  
 WW—Western Wire Products Co.  
 Waage Electric, Inc., 720 Colfax Ave., Kenilworth, New Jersey  
 Waage Mfg. Co., 632 N. Albany Ave., Chicago 12, Ill.  
 Wac Engineering Co., 35 S. St. Clair St., Dayton 2, Ohio  
 WACLIN—Wac Engineering Co.  
 Waco Manufacturing Co., 3565 Woodale Ave., Minneapolis 16, Minnesota  
 Wade Electric Products Co., 400 Jacobs St., Sturgis, Mich.  
 Wadsworth Electric Manufacturing Co., Inc., 20-34 West 11th St., Cornington, Kentucky  
 WAGENSLELL—Acme Mfg. & Gasket Co.  
 Wagner Electric Corp., 6400 Plymouth Ave., St. Louis 14, Missouri  
 Wagner Malleable Products Co., 222 West Adams St., Chicago 6, Illinois  
 Wagner Mfg. Co., 350 W. Adams St., Jackson, Mo.  
 Wagner Welding Products—see Wagner Mfg. Co., Inc.  
 WAHLQUIST—Nilsson Electrical Laboratory, Inc.  
 Wahlund Mechanical Laboratory, M. Paul, P. O. Box 16, Grant, Iowa  
 Wakefield Co., 731 S. Water St., Vermilion, Ohio  
 Wakefield Brass Co.—see Wakefield Co.  
 WAKEFIELD CEILING—Wakefield Co.  
 Walco Industries, Inc.—see Progressive Machine Works  
 WALDEN—Stevens Walden, Inc.  
 Waldman, John J., 20 Wall St., N. Y. 7, N. Y.\*  
 Waldron Corp., John, P. O. Box 791, New Brunswick, New Jersey\*  
 Walker Brothers, End St., Conshohocken, Pennsylvania\*  
 WALKERDUC—Walker Brothers  
 WALKERFLEX—Walker Brothers  
 WALKERPRENE—Walker Brothers  
 WALKIE-RECORDAL—Miles Reproducer Co., Inc.  
 WALL-AIRE—Cory Corp., Fresh'n-Aire Div.  
 WALL-FIN—Trane Co.  
 Wall Mfg. Co., P. O. Box 71, Grove City, Pa.  
 Wallace Products Co., B. E. Exton, Pa.  
 Wallace & Tiernan, Inc., 25 Main St., Belleville, N. J.  
 WALLAMP—La Salle Products, Inc.  
 WALLETTES—Colonial-Premier Co.  
 WALLURNITE—Gruber Lighting  
 WALLY—Walli Mfg. Co., P.  
 Walser Automatic Timer Corp., 420 Lexington Ave., New York 17, N. Y.  
 Waltham Screw Co., 77 Rumford Ave., Waltham 54, Mass.\*  
 Walton Co., Box 5, Elmwood Branch, Hartford 10, Conn.  
 Walton Laboratories, Inc., 1186 Grove St., Irvington 11, N. J.  
 Wama Co., Industrial Bldg., Baltimore 2, Md.  
 WAMPUN—Lastik Products Co., Inc.  
 Ward Leonard Electric Co., 115 MacQuesten Parkway, S. Mount Vernon, New York  
 Ware Bros.—see Ware Fuse Corp.  
 Ware Fuse Corp., 4400 W. Lake St., Chicago 24, Ill.  
 Waring Products Corp., Subsidiary of Claude Neon, Inc., 25 W. 43 St., N. Y. 36, N. Y.\*  
 Warner Electric Brake & Clutch Co., Beloit, Wis.\*  
 Warner Elevator Mfg. Co., 2613 Spring Grove Ave., Cincinnati 14, Ohio  
 WARNOCK—Lowell Wrench Co.  
 Warren Clock Co.—see General Electric Co., Telechron Dept.  
 Warren Lamp Co.—see Solar Electric Corp.  
 Warren Telechron Co.—see General Electric Co., Telechron Dept.  
 Warrick Co., Charles F., 1964 West Eleven Mile Rd., Berkley, Michigan  
 WARRIOR—Boston Woven Hose & Rubber Co.  
 WARRIOR—Phelps Dodge Copper Products Corp.  
 Warsaw Div., Watson Elevator Co., Inc., 220 S. Main St., Warsaw, N. Y.  
 Warsaw Elevator Co.—see Warsaw Div., Watson Elevator Co., Inc.  
 WASHINGTON-FRUGAL—Gray & Dudley Company  
 Washington Stove Works, 3402 Smith Ave., P. O. Box 919, Everett, Washington  
 WASTE CHAMP—Gaines-Collins Co., Quilads Tool Div.  
 WASTE KING—Given Mfg. Co.  
 WASTEMASTER—Lockley Machine Co.  
 WATCH CASE—Westinghouse Electric Corp.  
 WATCH DOG—General Electric Co.  
 WATCHMASTER—Carpenter Mfg. Co.  
 WATER BUOY—Kneisley Electric Co.  
 Water Level Controls Co.—see Healy-Ruff Co., Water Level Controls Div.  
 WATER-MUND—Mund Boilers, Inc.  
 Waterbury Companies, Inc., 835 South Main St., Waterbury, Connecticut\*  
 Waterbury Battery Co., 25 North Washington St., Plainville, Connecticut  
 WATERFLOW—American District Telegraph Co.  
 Waterman Products Co., Inc., 2445-63 Emerald St., Philadelphia 25, Pennsylvania  
 WATERTITE—Woodhead Co., Daniel  
 Watlow Electric Mfg. Co., 1376 Ferguson Ave., St. Louis 14, Mo.  
 Watson Elevator Co., Inc., 220 S. Main St., Warsaw, N. Y.  
 WATT—Elgo Shutter & Mfg. Co.  
 WATTS-AVER—Globe Stamping Div., Hupp Corp.  
 Watts Electric Co., 5542 N. Ashland Ave., Chicago 40, Ill.  
 WAXER KING—Atlas Floor Surfacing Machinery Corp.  
 Waxmaster Floor Machine Corp.—see Atlas Floor Surfacing Machinery Corp.

# COMPANY AND TRADE NAME DIRECTORY

WEAR-ARC—Alloy Rods Company  
 WEATHER-FLO—Automatic Devices Co., Inc.  
 WEATHER-MAN—Automatic Devices Co., Inc.  
 WEATHERCASTER—Minneapolis-Honeywell Regulator Co.  
 WEATHERMAKER—Carrier Corp.  
 WEATHERMASTER—Carrier Corp.  
 WEATHERMASTER—Stieber Mfg. Co.  
 WEATHERSTAT—Minneapolis-Honeywell Regulator Co.  
 WEATHERTRON—General Electric Co., Air Conditioning Div.  
 WEATHERWISE—Barkow Mfg. Co., Inc., Aug. G. Weaver Company, J. A., 2110 Howard St., St. Louis 6, Missouri  
 Welch Electric Mfg. Co., 1701 S. W. Jefferson St., Portland 1, Ore.  
 Webster Electric Co., 1900 Clark St., Racine, Wis.  
 WECOLATOR—Cheney Co., W. E.  
 WEDGE-TITE—American Pulley Co.  
 WEDGEBELT—American Pulley Co.  
 WEDGE-GRIP—Sherman Mfg. Co., H. B.  
 WEDGE-ON—Thomas & Betts Co.  
 Wedge Protectors, Inc., 3905 Jennings Rd., Cleveland 9, Ohio  
 WEDGE-PRUF—Roddick Tool Co.  
 WEDGEBELTS—American Pulley Co.  
 WEDGELOCK—Adalet Mfg. Co.  
 WEDGEIE—Insulation Manufacturers Corp.  
 WEDGETITE—Crouse-Hinds Co.  
 WEDGWOOD—Edwards Co., Inc.  
 WEE-PEE-WEE—Muelier Electric Co.  
 WEED KUTTER—International Electric Fence Co., Inc. Weidenhoff, Inc., Joseph, Algona, Iowa  
 Weiss & Bieller Merchandise Corp., 584 Broadway, New York 12, New York  
 Wej-Lock Mfg. Co.—see Grip-Tite Mfg. Co.  
 WEL-RAY—Weldon Mfg. Co.  
 Welbilt Stove Company, Inc., 57-18 Flushing Ave., Maspeth 78, New York  
 Welch Co., W. W., 1010 Enquirer Bldg., Cincinnati 2, Ohio  
 WELD-ARC—Alloy Rods Co.  
 WELD-BILT—West Bend Equipment Corp.  
 WELDANPOWER—Lincoln Electric Co.  
 Weldon Mfg. Co., 461-463 Broome St., N. Y. 13, N. Y.  
 WELDOPOWER—Raytheon Manufacturing Co.  
 Weller Electric Corp., 808 Packer St., Easton, Pa.  
 Weller Mfg. Co.—see Weller Electric Corp.  
 Wellington Machine Co., 133 De Wolf St., Wellington, Ohio  
 WELLOCT—Palmer Wellcof Tool Corp.  
 Wells Mfg. Co., 220 Ninth St., San Francisco 3, Calif.  
 Wells Manufacturing Corp., 5853 Jefferson St., Three Rivers, Michigan  
 Wen Products, Inc., 5808 Northwest Highway, Chicago 31, Ill.  
 Westronic Company, 19500 West Eight Mile Rd., Detroit 19, Michigan  
 WESCO—Westinghouse Electric Supply Co.  
 Westex Electric Heater Co., 390 First St., San Francisco 5, California  
 West Bend Equipment Corp., 16 Water St., West Bend, Wisconsin  
 West Instrument Corp., 525 N. Noble St., Chicago 22, Ill.  
 West Wing Corp., 1800 Airport Way, Seattle 4, Wash.  
 Westchester Brickade Products Co., Inc., 1528 Williamsbridge Rd., Bronx 61, New York  
 Westclox Div., General Time Corp., LaSalle, Ill.  
 WESTCO—Fairbanks, Morse & Co.  
 Western Automatic Machine Screw Co., P. O. Box 280, Elyria, Ohio  
 Western Electro-Mechanical Co., Inc., 300 Broadway, Oakland 7, Calif.  
 Western Insulated Wire Co., 2425 East 30 St., Los Angeles 58, California  
 Western Lithograph Co., Westline Products Div., 600 E. Second St., Los Angeles 54, Calif.  
 Western Pacific Transformer Co., Inc., Div. of Birdsell Mfg. Co., 750 San Antonio Rd., Palo Alto, Calif.  
 Western Wire Products Co., 1415-35 S. 18 St., St. Louis 4, Mo.  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.  
 Westinghouse Electric Corp., Electric Appliance Div., 246 E. Fourth St., Mansfield, Ohio  
 Westinghouse Electric Corp., Electric Appliance Div., 653 Page Blvd., Springfield 2, Mass.  
 Westinghouse Electric Corp., Elevator Div., 150 Pacific Ave., Jersey City 4, N. J.  
 Westinghouse Electric Corp., Lamp Div., Bloomfield, New Jersey  
 Westinghouse Electric Corp., Lighting Div., 1216 W. 58 St. (P. O. Drawer 5817), Cleveland 3, Ohio  
 Westinghouse Electric Corp., Sturtevant Div., Damon St., Hyde Park, Boston 36, Massachusetts  
 Westinghouse Electric Supply Co., 40 Wall St., New York 5, New York  
 Westline Products Div., Western Lithograph Co., 600 E. Second St., Los Angeles 54, Calif.  
 WESTLITE—Associated Lighting Service  
 WESTMINSTER—Edwards Company, Inc.  
 WESTON—Round & Son, Inc., David  
 Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark 5, New Jersey  
 Weston Electronics Corp.—see Western Corp.  
 WESTPORT—Hoyt Manufacturing Corp.  
 Weston Corp., 652 Hudson St., New York 14, New York  
 WETOIL—Farrelloy Co.  
 WHEAL—Forsberg Mfg. Co.  
 WHEAT—Koehler Manufacturing Co.  
 Wheat Laboratories—see Koehler Mfg. Co.  
 WHEEL-A-BREEZE—Welch Co., W. W.  
 WHEEL-ABOUT—Rich Fan Mfg. Co., Inc.  
 WHEELABRATOR—American Wheelabrator & Equipment Corp.  
 WHEELCO—Barber-Colman Co.

Wheeler Insulated Wire Co., Div. of Sperry Corp., 150 E. Aurora St., Waterbury 20, Conn.  
 Wheeler Reflector Co., 275 Congress St., Boston 10, Massachusetts  
 Wheeling Machine Products Co., Wheeling, W. Va.  
 WHEELOCK—Signal Engineering & Mfg. Co.  
 WHIRL-BEAM—Sireno Co., Inc.  
 WHIRLAIRE—Westinghouse Electric Corp., Springfield  
 WHIRLPOOL—Standard Electric Mfg. Co., Inc.  
 Whitaker Reel Mfg. Co., 3704 Jackson St., (P. O. Box 1318), Monroe, La.  
 White Company, O. C., 15-21 Hermon St., Worcester 8, Massachusetts  
 WHITE CANNERS—Boston Woven Hose & Rubber Co.  
 WHITE CHIEF—Carlson & Sullivan, Inc.  
 WHITE CLOUD—Loverall Lighting Corp.  
 WHITE LINE—Roe & Sons, Inc., Justus  
 White Metal Rolling & Stamping Corp., 80 Moultrie St., Brooklyn 22, N. Y.  
 White Mountain Freezer Co., Inc., Nashua, N. H.  
 WHITE NIGHT—Metalcraft Products Co., Inc.  
 White-Rodgers Electric Co., 1209 Cass Ave., St. Louis 6, Missouri  
 WHITHEAD Metal Products Co., Inc., 303 W. 10th St., N. Y. 14, N. Y.  
 WHITING—Republic Steel Corp., Chain Div.  
 WHITTING—Round Bridgeport Chain & Mfg. Co.  
 WHITELIGHT—White Metal Rolling & Stamping Corp.  
 WHITLOW—Dale Products, Inc.  
 Whitman & Barnes—see United Drill and Tool Corp.  
 Whitney-Blake Company, 1565 Dixwell Avenue, New Haven 14, Connecticut  
 Whitney Chain Company, 237 Hamilton St., Hartford 2, Connecticut  
 WHIZ—Crown Industrial Products Co.  
 WHIZ—Rockford Wire Stripper Co.  
 WHIZ-MIX—Bersted Mfg. Co.  
 WHIZ-SAW—Forsberg Manufacturing Co.  
 WICK-O-LITE—North American Electric Lamp Co.  
 Wickes Corp., U. S. Graphite Co. Div., 1621 Holland Ave., Saginaw, Michigan  
 WIDE-SPREAD—Holophane Company, Inc.  
 Wiegand Co., Edwin L., 7637 Thomas Blvd., Pittsburgh 8, Pennsylvania  
 Wil-Son Manufacturing Co., Cloverport, Kentucky  
 Wilbur & Williams Co., 130 Lincoln St., Boston (Brighton) 35, Mass.  
 WILCO—Oster Mfg. Co.  
 Wide Drop Forge & Tool Co., 2938 Fairmount, Kansas City 8, Mo.  
 Wilder Manufacturing Co., Inc., Mechanic St. & Erie Railroad, Port Jervis, New York  
 Wiley, Inc., R. & W. Dearborn & Bridge St., Buffalo 7, N. Y.  
 Wiley Displays, Inc.—see Wiley, Inc., R. & W.  
 Willard Storage Battery Co., 246-286 E. 131 St., Cleveland 1, Ohio  
 Williams & Company, J. H., 400 Vulcan St., Buffalo 7, New York  
 Williams Mfg. Co., Hugh B., 8330 Lovett St. (P. O. Box 7815), Dallas 10, Tex.  
 Williams Products Co., H. E., 106 S. Main St., Carthage, Mo.  
 Wilmington Fibre Specialty Co., New Castle, Dela.  
 WILSHIRE—Southern Heater Corp.  
 Wilson & Co., G. C., 1950 8th Ave., Huntington, W. Va.  
 Wilson-Albrecht Co., Inc.—see Waco Mfg. Co.  
 Wilson Rubber Co., 1200 Garfield Ave., S.W., Canton 6, Ohio  
 Wincharger Corp., E. Seventh & Division St., Sioux City 6, Iowa  
 WINCHESTER-OLIN—Olin Industries, Inc.  
 WINCO—Wincharger Corp.  
 WIND-ELECTRIC—Hirschman-Pohle Co., Inc.  
 WIND-O-VENT—Diel Manufacturing Corp.  
 Wind-Way Fan & Ventilator Co., 531 St. Joseph St., New Orleans 12, La.  
 WINDALL—Wagge Mfg. Co.  
 WINDMAKER—Rich Fan Manufacturing Co., Inc., Phil.  
 WINDOLITE—Light & Power Utilities Corp.  
 WINDOW WONDER—Rich Fan Mfg. Co., Inc., Phil.  
 Wing Manufacturing Co., L. J., 2300 Vreeland Mills Rd., Linden, New Jersey  
 WINGLOP—Wing Manufacturing Co., L. J.  
 WINNER—Curtis Lighting, Inc.  
 Winpower Mfg. Co., 1207 First Ave. E., Newton, Iowa  
 WINTERGARDE—Pyrene Manufacturing Co.  
 WINTERWARM—Electric Parts Corp.  
 WIRE-MIKE—Burndy Engineering Co., Inc.  
 WIRE-NUTS—Ideal Industries, Inc.  
 WIREDHEAT—Westex Electric Heater Co.  
 WIREDUCT—Wiremold Co.  
 WIREGRIP—Armstrong-Bray & Co.  
 Wiremold Company, Hartford 10, Connecticut  
 WIREWA—National Electric Products Corp.  
 WIREWATT—Omlette Mfg. Co.  
 WIRT—Everett, Inc., E. A.  
 WISCO—Wisconsin Storage Battery Co.  
 Wisconsin Carbon Corp.—see Kirkwood Carbon Corp.  
 Wisconsin Clock Co., 1561 W. Windlake Ave., Milwaukee, Wis.  
 Wisconsin Electrical Mfg. Co., Inc., 4010 W. Douglas Rd., Milwaukee, Wis.  
 Wisconsin Storage Battery Co., 1222 18th St., Racine, Wis.  
 Wiss & Sons Co., J., 11-45 Littleton Ave., Newark 7, N. J.  
 WIZARD—Beam Manufacturing Co.  
 WIZO—Elkay Products Co.  
 WOODACK—Waveland Electric Co.  
 Woodack Electric Tool Corp., 4627 West Huron St., Chicago 44, Illinois  
 WOLMAN—Koppers Co., Inc.  
 WOLMANIZED—Koppers Co., Inc., Wood Preserving Div.  
 WON-DOR—Howard Refrigerator Co., Inc.  
 WONDER BENDER—American Pipe Bending Machine Co., Inc.

WONDER LITE—Magni Flood, Inc.  
 WONDERAIR—Servel, Inc.  
 WONDERBAR—Servel, Inc.  
 Wood Co., John, 100 Washington St., Conshohocken, Pa.  
 Wood Specialty Mfg. Co.—see General Cement Mfg. Co.  
 Woodhead Co., Daniel, 15 North Jefferson St., Chicago 6, Illinois  
 Woodward Machine Co., Lighting Div., 4833 Elmhurst, Detroit 4, Mich.  
 Wooster Div.—see Borg-Warner Corp., Cleveland Com-mutator Div.  
 WORKLITE—Fairchild Camera & Instrument Corp., Fairchild Industries Div.  
 Work-O-Lite Co., 522 Cortlandt St., Belleville 9, N. J.  
 Workrite Manufacturing Co., 2451 Broadway, Santa Monica, California  
 Worner Electronic Devices, Rankin, Ill.  
 WORTH—Peck Stow & Wilcox Co.  
 Worthington Corp., Worthington Ave., Harrison, N. J.  
 WRAP-CAP—Ideal Industries, Inc.  
 WRIGHT—Electric Controller & Mfg. Co.  
 WRIGHT CIRCUIT—Electric Controller & Mfg. Co.  
 Wright Hoist Div., American Chain & Cable Co., Inc., 454 E. Princess St., York, Pa.  
 Wrought Washer Mfg. Co., 2280 South Bay St., Milwaukee 7, Wisconsin  
 WYCO—Wyzenbeek & Staff, Inc.  
 WYD-ANGLE—Ess Instrument Co.  
 Wyem Products Co., inc., 2292 S. Taylor Rd., Cleveland 18, Ohio  
 WYTE LINERS—Guth Co., Edwin F.  
 Wyzenbeek & Staff, Inc., 223 N. California Ave., Chicago 12, Ill.

## X

XL—Excel Fuse Company  
 X-L—Henderson Electric Co.  
 X-L—Excelsior Leather Washer Mfg. Co., Inc.  
 X-O—Square D Company  
 X-Ray Reflector Co.—see Curtis Lighting, Inc.  
 X-VAR—Fidelity Chemical Products Corp.  
 XACTO—Boswer, Inc.  
 XCEL—Xcelite, Inc.  
 Xcelite, Inc., Thorne Ave. at Bank St., Orchard Park, N. Y.  
 XDUCT—National Electric Products Corp.  
 XELA—Klein & Sons, Mathias  
 XIT—Tona Ventilator Co., Inc.  
 XTENSION DUCT—National Electric Products Corp.

## Y

Y-ER-EAS—Electro Compound Co.  
 YAGER—Benson Co., Inc., Alex R.  
 YAK—Mercury Manufacturing Co.  
 Yale Materials Handling Div., Yale & Towne Mfg. Co., Roosevelt Blvd. at Halderman Ave., Phila. 15, Pa.  
 YANK—Mercury Manufacturing Co.  
 YANKEE—North Bros. Mfg. Co.  
 YANKEE—Stanley Tools  
 Yankee Tools, Lehigh Ave. & American St., Phila. 33, Pa.  
 YARD LITE—Markel Electric Products, Inc.  
 YARDMASTER—Porter-Cable Machine Co.  
 Yardeny Electric Corp., 40-26 Leonard St., New York 13, N. Y.  
 Yardeny International Corp.—see Yardeny Electric Corp.  
 Yardeny Laboratories, Inc.—see Yardeny Electric Corp.  
 Yeats Appliance Dolly Sales Co., 2124 North 12th St., Milwaukee 5, Wisconsin  
 YELLOW-FLASH—Justrite Mfg. Co.  
 York Corp., Roosevelt & P. R. R., York, Pa.  
 York Ice Machinery Corp.—see York Corp.  
 York Mfg. Co.—see York Corp.  
 YORKAIRE—York Corp.  
 Yorkville Metal Products Co., 677 Broadway, N. Y. 12, N. Y.  
 Young & Bertke Co., 2277 Buck St., Cincinnati 22, Ohio  
 Young Bros. Co., 1831 Columbus Rd. N. W., Cleveland 13, Ohio  
 Young Engine Corp., 2110 Allen Ave. S. E., Canton, Ohio  
 YOUNG MODERNS—Lightoller, Inc.  
 YOUNGSTOWN—Electric Controller & Mfg. Co.  
 Youngstown Sheet and Tube Co., Stambaugh Bldg., Youngstown 1, Ohio

## Z

Zachary, George G., 10132 E. Rush St., El Monte, Calif.  
 ZENITH—United States Rubber Co.  
 Zenith Electric Co., 155 W. Walton St., Chicago 10, Ill.  
 ZEON—Cutler Light Mfg. Co.  
 ZEPHAIR—Hunter Fan & Ventilating Co.  
 ZEPHRO-TROL—Welbilt Stove Company, Inc.  
 ZEPHYR—Chester Hoist Div., National Screw & Mfg. Co.  
 ZEPHYR—DoAll Co.  
 ZEPHYR—Portable Electric Tools, Inc.  
 Zernickow Company, O., 15 Park Row, New York 38, New York  
 ZERO—Bersted Mfg. Co.  
 ZERO-START—Phillips Manufacturing Co., Inc.  
 ZIP—Mid-States Welder Mfg. Co.  
 ZIPCORD—U. S. Rubber Co.  
 ZIPLITE—U. S. Rubber Co.  
 ZIPON—Ironbound Operating Co.  
 ZOO—Aero-Motive Manufacturing Co.  
 ZONE PAC—Barber-Colman Co.  
 ZOREX—Adjustable Fixture Co.



# Manufacturers' Product Data Section



## Detailed information on electrical products

This section contains data presented by manufacturers of electrical apparatus and supplies, utilization equipment, components, tools and accessories. Descriptions of a wide range of electrical products include installation and application data, performance characteristics and specifications.

These advertisements do not necessarily cover all products of the manufacturers represented. Companies are listed in the **Product Directory**, beginning on page 151, under each product of their manufacture.

For an index to advertisers in this issue, see page facing inside back cover.

# ACCURATE MANUFACTURING COMPANY

GARFIELD • NEW JERSEY

OVER A QUARTER CENTURY OF TAPE SPECIALIZATION

## ACCURATE FRICTION TAPE



High quality tacky tape furnished in sizes and packings for all commercial uses. Finest live rubber thoroughly impregnated into highest grade cotton base cloth. A superior product for all electrical and general service. Available in standard and A.S.T.M. grades.

## ACCURATE RUBBER TAPE



A live stretch splicing tape made from top quality unvulcanized rubber compound. Uniform in thickness, width and physical characteristics. Self-fusing without heat. Varnished cambric separator protects tape until ready to use. Available in standard and A.S.T.M. grades.

## ACCURATE ASTM TAPE



**FRICTION:** Exceeds all requirements of American Society for Testing Materials designation D69-48T by a wide margin. An exceptionally high quality friction tape. Furnished in 41½ and 82½ foot rolls of any specified width.

**RUBBER:** Exceeds all requirements of American Society for Testing Materials designation D119-48T by a wide margin. A superior rubber tape made of carefully selected and compounded ingredients. Furnished in 15 and 30 foot rolls of any required width.

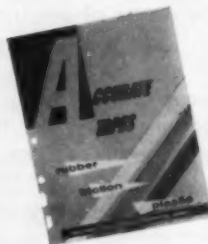
## ACCURATE PLASTIC TAPE



The new, fast applying insulating tape recommended for use wherever plastic tape is applicable. Thin caliper, good stretch, excellent strength and high dielectric make Accurate Plastic Tape, the leading choice of electrical men, everywhere. When the job calls for plastic insulation, Accurate will speed the work and afford lasting protection. Available in both .007 inch and .010 inch thicknesses and in various lengths and widths.

## A COMPLETE GUIDE TO ELECTRICAL TAPE—THE NEW

## ACCURATE CATALOG



The handy reference literature tape users and buyers will find invaluable. To receive your file copy, just call or write Accurate Manufacturing Company, Garfield, New Jersey, and ask for catalog #47.



Accurate Display boxes are available in two sizes for counter or show window.



Handy Accurate ten roll container keeps job quantities of tape clean, ready for use.

For FAST SERVICE on tape in any quantity, contact the nearest ACCURATE representative.



WAREHOUSE STOCKS and REPRESENTATIVES  
IN ALL PRINCIPAL CITIES

### TIGER BRAND VARNISHED CAMBRIC



The great "in between" insulation. Varnished cambric resists moisture better than paper, and it resists heat better than rubber. When carefully selected, varnished cambric can be used as an all-purpose insulation to replace either paper or rubber when it is important to keep inventories low.

Code designation "V." Temperature rated at 85°C.

Available in a full range of sizes with cotton or asbestos braid, lead sheaths, interlocking armor or thermoplastic jackets. Single or multiple conductor. Many other constructions can be furnished.

### TIGER BRAND AMERBESTOS

American Steel & Wire offers a full range of heat-resistant asbestos-insulated wire and cable. The asbestos is *not* wrapped around the conductor. Rather, all Amerbestos uses felted asbestos which is packed over the conductor to give an insulation that will not break open when the wire or cable is bent.

#### FOLLOWING TYPES ARE AVAILABLE:

- A**—plain asbestos
- AA**—asbestos with asbestos braid
- AI**—impregnated asbestos *without* asbestos braid

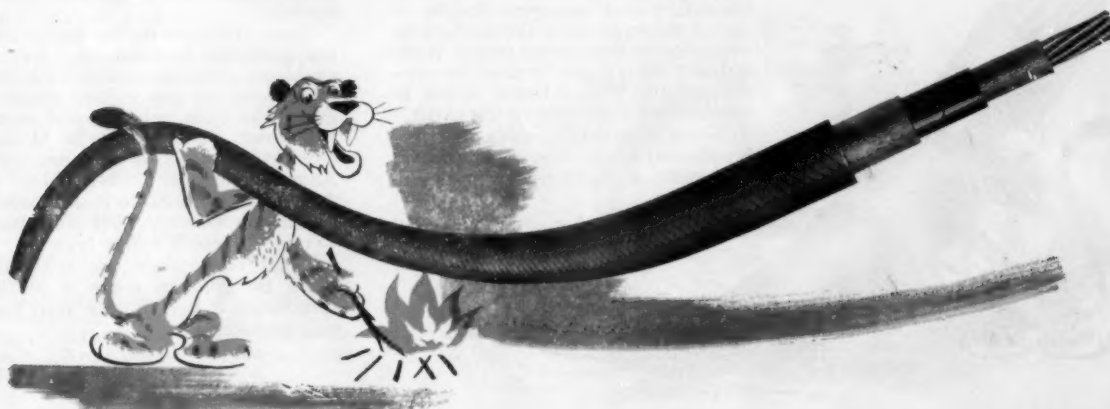
**AIA**—impregnated asbestos *with* asbestos braid

**AVA**—asbestos with varnished cambric

**AVL**—asbestos with varnished cambric and lead sheath

**AVB**—asbestos with varnished cambric and cotton braid

Many constructions and sizes can be supplied, such as special wires and cables for rheostats, stoves, switchboards, mining equipment, electrical fixtures—as well as a wide range of heavy-duty, high voltage power cables.





# Tiger Brand

## TIGER BRAND PAPER CABLE



For high voltage feeders. Tiger Brand Paper Cable is available in solid or gas pressure types. Insulation is carefully heated under vacuum before impregnating to remove every trace of moisture.

Lead sheaths are applied under high pressure to insure dense, homogeneous surface. Lead melting tanks

are kept in inert atmosphere to prevent formation of impurities. Arsenical or copper-bearing lead alloys can be furnished for sheaths. The former has more resistance to bursting, bending and vibration, but it is more expensive and difficult to pull than standard lead sheaths.

Many special constructions are available as standard production. Sheaths can be covered with a range of protective materials, such as metallic armor, jute, duck tapes or reinforced rubber.

**NEW.** For corrosive locations, Tiger Brand Paper Cables available with type GN jacket (heavy neoprene, reinforced with glass and fabric).

## TIGER BRAND ELEVATOR CABLE



American Steel & Wire is one of the largest manufacturers of elevator cable. Flexibility is designed into the cable so it will bend easily at the bottom of the shaft, yet not have so sharp a loop that wires will be deformed.

### FOLLOWING TYPES ARE STANDARD:

**Type E**—rubber and cotton  
—for general use.

**Type EO**—neoprene jacket  
—for hazardous locations.

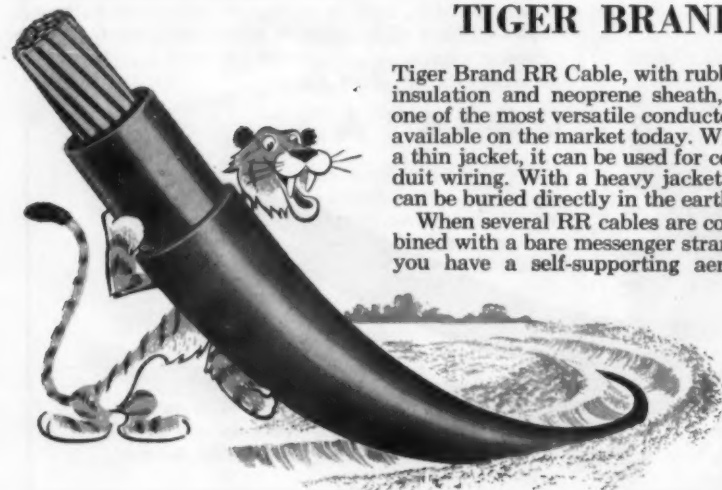
**Type ET**—thermoplastic and rayon  
—fire retardant, for general use.

*All 3 types are available with steel supporting fillers if desired.*

*Type ET combines maximum fire protection and small diameter (latter due to thinner insulation).*

American Steel & Wire can also furnish a complete line of Tiger Brand annunciator cable, lighting cable, signal cable and hatch wire for use in and around elevator shafts.

## TIGER BRAND TYPE RR CABLE



Tiger Brand RR Cable, with rubber insulation and neoprene sheath, is one of the most versatile conductors available on the market today. With a thin jacket, it can be used for conduit wiring. With a heavy jacket, it can be buried directly in the earth.

When several RR cables are combined with a bare messenger strand, you have a self-supporting aerial

cable for service drops and power feeders.

Many different rubber insulations are available to meet your special problems. Amerine type RWS is recommended for low voltage applications. For high voltages and ozone resistance, Amerzone type O (oil base rubber) is often indicated. Amerzone type B (butyl rubber) is the newest type. Since it is moisture and ozone resistant, it is often used to replace type RWS or type O.

Other compounds are available. We'll be glad to make a recommendation if you outline your specific problem.

## ELECTRICAL WIRE AND CABLE

### TIGER BRAND BUILDING WIRE

It is not possible to list the many different Tiger Brand building wires and cables available. The following are a representative group:

#### SERVICE DROP CABLE

Different constructions are available in three basic styles:

1. Self-supporting types
2. Imbedded neutral types
3. Flat tape neutral type

#### SERVICE ENTRANCE CABLE

Standard construction is the SE type U, consisting of 2 rubber conductors with concentric neutral plus tape and braid. Gray paint finish.



### INTERIOR WIRES

Type	Temp. rating	Construction
R	60°C.	rubber insulation, moisture and flame retardant braid
RH	75°C.	heat-resistant rubber and flame retardant braid
RW	60°C.	moisture-resistant rubber and flame retardant braid
RHRW	60°C. wet 75°C. dry	moisture and heat-resistant rubber and flame retardant braid
RHW	75°C. wet or dry	moisture and heat-resistant rubber and flame retardant braid
T	60°C.	thermoplastic
TW	60°C.	moisture-resistant thermoplastic
TA	90°C.	thermoplastic and asbestos with flame retardant cotton braid (for switchboard wiring only)

Above wires and cable can be furnished with aluminum conductors if desired. Jackets can be flame retardant cotton braid or lead sheath with rubber.

### TIGER BRAND AMERCLAD

Amerclad is our term for a complete line of *heavy-duty* portable cords and cables. The jackets for *all* cords and cables are vulcanized in a lead sheath to insure dense rubber and concentric conductors.

All cords and cables are permanently marked with molded identifications to facilitate future record-keeping.

The high neoprene-content jackets are extremely flexible, and have phenomenal resistance to abuse, sunlight, grease and oil or acid mine water.

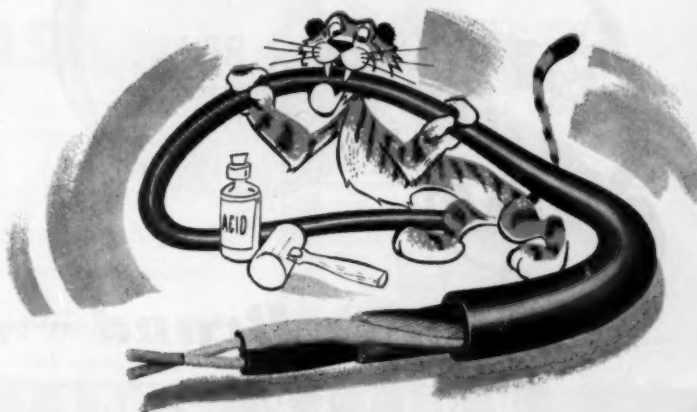
#### FOLLOWING TYPES ARE STANDARD:

**Type 50 portable cords**—available with 1 through 8 conductors, conductor size from AWG 18 to AWG 10. Careful filler and jacket application make this cord highly resistant to impact or crushing.

**Type 5JO portable cords**—have same construction as above type 50 cords except that the jacket is lighter. Available with 2, 3 or 4 conductors, AWG 18 and 16.

**Welding cable**—has same features as above except for number of individual wires per conductor. Size AWG 1, for example, has 2107 *separate* wires to prevent kinking and relieve strain on operators' wrists. All welding cables are single conductor. Conductor size ranges from AWG 8 to 300,000 CM.

**Other Amerclad cables**—Heavy-duty multiple-conductor cables are manufactured for power shovels of any size, dredges, mining machines and comparable equipment. Voltage ratings up to 15,000 can be furnished. Conductor sizes range to 1,000,000 CM.



# Tiger Brand ELECTRICAL WIRE & CABLE

## OTHER TIGER BRAND ELECTRICAL PRODUCTS

American Steel & Wire makes hundreds of types of electrical wire and cable not listed here. Also, special or new constructions can be specially made up to suit your needs. Some unlisted Tiger Brand products are:

**MAGNET WIRE**—with Mylar, paper, glass, Nylon or Amvar (Formvar type) insulations. Special types are available for unusual dielectric strength, abrasion resistance or heat resistance.

**ANNUNCIATOR WIRE**—for signal systems.

**MACHINE TOOL WIRE**

**ARMORED SUBMARINE CABLE**—manufactured with various protective coverings, including round wire armor. Also available in non-leaded construction for light weight (an American Steel & Wire first).

**WIRE FOR OVERHEAD AND OPEN WIRE EXTENSIONS**—including weather-proof types, Neoproof (neoprene insulation) and Ampolene (polyethylene insulation).



AMERICAN STEEL & WIRE DIVISION, UNITED STATES STEEL CORPORATION, GENERAL OFFICES: CLEVELAND, OHIO  
COLUMBIA-GENEVA STEEL DIVISION, SAN FRANCISCO, PACIFIC COAST DISTRIBUTORS • TENNESSEE COAL & IRON DIVISION, FAIRFIELD, ALA., SOUTHERN DISTRIBUTORS  
UNITED STATES STEEL EXPORT COMPANY, NEW YORK



## A STANDARD TIGER BRAND CABLE FOR EVERY SPECIAL JOB

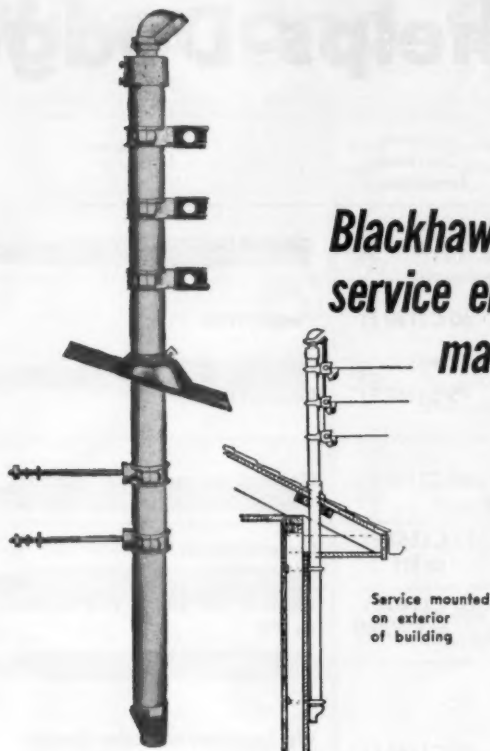
- asbestos wire and cable
- mold cured portable cord
- aerial, underground and submarine cable
- shovel & dredge cable
- paper & varnished cambric cable
- machine tool & building wire
- special purpose wire & cable

**USS Tiger Brand** — **ELECTRICAL WIRE & CABLE**



UNITED STATES STEEL





## Blackhawk's complete service entrance mast fittings:

## Easy to stock

... order only when necessary to replenish levels of individual fittings; no need to break up complete assemblies to sell separate fittings.

## Easy to sell

... customers like to buy fittings as needed; Blackhawk supplies the easy-to-buy, easy-to-use line.

## Easy to install

... these simple, well-designed standard-size fittings require no special tools or installation methods.

Also available in complete Service Entrance Mast Assembly kits

**Specify B-I when you buy!**

Immediate delivery ... to electrical wholesalers only



**BLACKHAWK INDUSTRIES**

Dubuque, Iowa



### 1 1/4" UNIVERSAL CONDUIT ENTRANCE HEAD

No. 1428 Made of Non-Rusting Ductile Aluminum



### PIPE FITTER— SLIP FIT ADAPTER

No. PF-64, illustrated — has 2 Set Screws, 1 1/4" Male Thread. Adapts Universal Head to 2" pipe.

No. PF-74 — same principle as above, but is adapter for 2 1/2" pipe.



### PIPE MOUNTING REINFORCED INSULATOR

No. 71-C, illustrated — Special ductile aluminum clamp for 2 1/2" pipe.

No. 61-C has clamp for attachment to 2" pipe.



### PULL OFF FITTING

No. 72-C — for use as a take-off for wedge-type clamp with bail to support Self Supporting ACSR Service Drop Cable. Special aluminum alloy for use on 2 1/2" conduit. Drop forged eyelet extension.



### OFFSET ADAPTER

No. OA-64, illustrated — 2" to 1 1/4" adapter, to facilitate meter connection. Not shown:

No. OA-65 — 2" to 1 1/2" Offset Adapter

No. OA-74 — 2 1/2" to 1 1/4" Offset Adapter

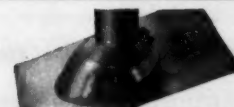
No. OA-75 — 2 1/2" to 1 1/2" Offset Adapter



### PIPE MOUNTING BRACKET

No. MB-7, illustrated — 2 1/2" pipe mounting bracket. Heavy ductile aluminum, combined with 1/2" x 10" bolt. Washer, lock washer, nut are furnished.

No. MB-6 — for 2" pipe. Ductile aluminum, 1/2" x 10" bolt and fasteners.



**GALVANIZED STEEL ROOF FLASHING**  
No. RFOS-7, illustrated — has protective collar for 2 1/2" pipe.

No. RFOS-6 for 2" pipe. Simple installation of both.










# Index of Phelps Dodge

Wires and Cables	Type Letter	Habirshaw Trade Name or Designation	Maximum Operating Temperature	U S E
	<b>R</b>	Flamestop Code	60 C (140 F)	General Use
	<b>RF</b>	Flamestop Code	60 C (140 F)	Fixture Wire
	<b>RH</b>	Flamestop Heat-Resistant	75 C (167 F)	General Use
	<b>RW</b>	Flamestop Moisture-Resistant	60 C (140 F)	General Use and in Wet Locations
	<b>RH-RW</b>	Flamestop Heat or Moisture-Resistant RH-RW	75 C (167 F) as RH	General Use as RH
			60 C (140 F) as RW	General Use and in Wet Locations as RW
	<b>RL</b>	Rubber Lead	60 C (140 F)	Wet Locations and other Special Conditions
				
	<b>RHL</b>	Heat Resistant Rubber Lead	75 C (167 F)	Wet Locations and other Special Conditions
				
	<b>TW</b>	Habirdure Thermo-plastic Insulated	60 C (140 F)	General Use and in Wet Locations
	<b>TF</b>		60 C (140 F)	Fixture Wire
	<b>None</b>	Habirdure Machine Tool, Control, and Switchboard Wire	80 C (176 F) in air 60 C (140 F) in oil	Machine Tool, Control and Switch-board Wiring
	<b>None</b>	PD-X Nonmetallic-Sheathed Cable	60 C (140 F)	For Wiring Houses, Rural Buildings, Small Stores, and Shops.
				
	<b>UF</b>	Perma-Dure	60 C (140 F)	UF: Underground Feeder and Branch Circuit Cable for Direct Burial.
	<b>UF-NMC</b>			NMC: For Interior Wiring in Moist or Corrosive Locations.

PHELPS DODGE COPPER PRODUCTS CORPORATION

# Wires and Cables



Wires and Cables	Type Letter	Habirshaw Trade Name or Designation	Maximum Operating Temperature	USE
	SE	Service Entrance Type SE—Style U Unarmored	60 C (140 F)	Service Entrance or Combination Service Drop & Service Entrance
	SE	Service Entrance Type SE—Style A Armored	60 C (140 F)	Service Entrance or Combination Service Drop & Service Entrance
	SD	Service Drop Type SD	60 C (140 F)	Service Drop
	USE	Service Entrance Type USE	60 C (140 F)	Underground Service Entrance, Direct Burial.
	V	Varnished Cambric Braided	85 C (185 F)	Dry locations only. Smaller than No. 6 by special permission.
	VL	Varnished Cambric Lead	85 C (185 F)	Wet or Dry locations. Smaller than No. 6 by special permission.
	None	Type RR	75 C (167 F) Low Voltage 85 C (185 F) High Voltage	General Purpose for Direct Burial, Aerial, Conduit and Underground Duct Installations.
	S or SO	Hard Service Cord	60 C (140 F)	Pendant or portable extra hard usage in damp locations; SO for oil resistance.
	SJ or SJO	Junior Hard Service Cord	60 C (140 F)	Pendant or portable hard usage in damp locations; SJO for oil resistance.
	SP (Formerly P0SJ)	All Rubber Parallel Cord	60 C (140 F)	For use in pendant or portable applications in damp locations not subject to hard usage
	C	Lamp Cord	60 C (140 F)	For pendant or portable applications in dry places not subject to hard usage

HABIRSHAW BUILDING WIRES AND CABLES



# A DIGEST OF DAY-BRITE DATA

## SLIMLINE "RANGER"



OPEN TYPE FIXTURE

## DIRECT TYPE FIXTURES

LAMP NO.	LAMP SIZE	FIXTURE DIMENSIONS			CATALOG NUMBER
		LENGTH	WIDTH	HEIGHT	
2	8-FT.	95½"	7"	4¼"	96260

ALSO AVAILABLE FOR 4-FOOT RAPID-START LAMPS

## RANGER DATA

**APPLICATION**—Unit or continuous. **MOUNTING**—Surface or suspension. **CONSTRUCTION**—Die-formed and welded heavy-gauge steel. **FINISH**—HOT-BONDED SUPER-WHITE enamel. **WIRING**—TURRET sockets. Instant start HPF 430-milliamperes Certified ballasts. UL approved.

† G. E. Co.

## SLIMLINE "PLEXOLINE-2"



WITH LOW BRIGHTNESS NO. 9015 HOLOPHANE CONTROLS\*

LAMP NO.	LAMP SIZE	FIXTURE DIMENSIONS			CATALOG NUMBER
		LENGTH	WIDTH	HEIGHT	
2	8-FT.	96¾"	12¾"	4"	97720

ALSO AVAILABLE FOR 4-FOOT RAPID-START LAMPS

## LENS PLEXOLINE DATA

**APPLICATION**—Unit or continuous. **MOUNTING**—Surface or suspension. **CONSTRUCTION**—Die-formed steel. One-piece enclosure and chassis. Reflector plates for 100% direct distribution. **SHIELDING**—No. 9015 Controls in separable hinged frames. **WIRING**—CBM Certified ballasts. Individually wired for unit, continuous, surface or suspension installation. UL approved.

## FLUORESCENT "MOBILEX"

A NEW RECESSED LIGHTING SYSTEM FOR USE WITH GRID TYPE SUSPENDED CEILING

\* Owen-Corning Fiberglas Corp.



GLASS LOUVERS PLASTIC

2-LAMP FLUORESCENT			3-LAMP FLUORESCENT			4-LAMP FLUORESCENT		
LAMP SIZE	FIXTURE DIMENSIONS	CATALOG NO.	LAMP SIZE	FIXTURE DIMENSIONS	CATALOG NO.	LAMP SIZE	FIXTURE DIMENSIONS	CATALOG NO.
2-FT.	24"x24"	2G270	2-FT.	24"x24"	2G370	2-FT.	24"x24"	2G470
4-FT.	24"x48"	4G270	4-FT.	24"x48"	4G370	4-FT.	24"x48"	4G470
2-FT.	24"x24"	2G260	2-FT.	24"x24"	2G360	2-FT.	24"x24"	2G460
4-FT.	24"x48"	4G260	4-FT.	24"x48"	4G360	4-FT.	24"x48"	4G460
2-FT.	24"x24"	2G290	2-FT.	24"x24"	2G390	2-FT.	24"x24"	2G490
4-FT.	24"x48"	4G290	4-FT.	24"x48"	4G390	4-FT.	24"x48"	4G490

## MOBILEX DATA

**APPLICATION**—Single unit, end to end, side to side. **MOUNTING**—Recessed into grid type suspended ceiling. Fixture rests on interlocking "tees" which also support Fiberglas Ceiling Board. Flange type Mobilex also available for conventional ceilings. **SHIELDING**—Skytex glass panels, Boxco louvers, or moulded plastic panels. **FINISH**—HOT-BONDED SUPER-WHITE enamel. **WIRING**—Sockets, Certified ballasts and NO-BLINK type starters on 20-watt units. All 40-watt units furnished with RAPID-START ballasts. UL approved.

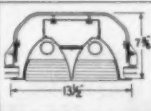
## ALZAK PARALOUVER



FLANGE TYPE SHOWN

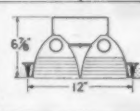
## FLANGE TYPE

LAMPS	FIXTURE LENGTH	CATALOG NO.
2/4-FT.	48"	4F201



## SNAP-IN TYPE

LAMPS	FIXTURE LENGTH	CATALOG NO.
2/4-FT.	48"	4M201



## TROFFER DATA

### PARALOUVER

Diffuse Alzak aluminum troffers provide low brightness contrast. Center "V" louver and patented lateral louvers interlocked for strength. Available also in all-white finish and in Slimline.

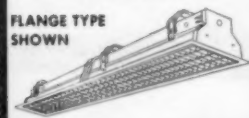
### HINGED SERIES

Four shielding elements available: ribbed Skytex glass panels, Boxco louvers, egg-crate louvers and low brightness 9015-DB Controls. Each shielding element is separably hinged, allows hinging from either side. Available also in Slimline.

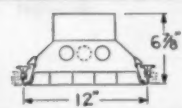
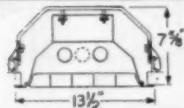
### GENERAL

**CONSTRUCTION**—Die-formed through-out. Removable wireway cover. Continuous wiring channel. **FINISH**—HOT-BONDED SUPER-WHITE enamel. **WIRING**—sockets, CBM Certified ballasts. RAPID-START ballasts, UL approved.

## EGG-CRATE LOUVERS



FLANGE TYPE SHOWN



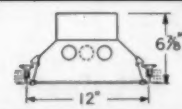
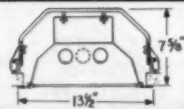
LAMPS	FIXTURE LENGTH	CATALOG NUMBER
2/4-FT.	48"	4F211
3/4-FT.	48"	4F311

LAMPS	FIXTURE LENGTH	CATALOG NUMBER
2/4-FT.	48"	4M211
3/4-FT.	48"	4M311

## HINGED GLASS ENCLOSED



FLANGE TYPE SHOWN



LAMPS	FIXTURE LENGTH	CATALOG NUMBER
2/4-FT.	48"	4F220
3/4-FT.	48"	4F320

LAMPS	FIXTURE LENGTH	CATALOG NUMBER
2/4-FT.	48"	4M220
3/4-FT.	48"	4M320

## TROFFER ACCENT UNITS



ADJUSTABLE—FLANGE TYPE  
CATALOG NO. 80137  
ADJUSTABLE—SNAP-IN TYPE  
CATALOG NO. 80127

FIXED—FLANGE TYPE  
CATALOG NO. R-80135  
FIXED—SNAP-IN TYPE  
CATALOG NO. R-80125

## PLASTER FRAMES

FOR	CATALOG NO.
Accent Unit—12"x12"	7770
4-ft. Troffer Units	7771
8-ft. Troffer Units	7771-8

Die-formed "T" formation provides rigid strength. Holes in rails for wiring to furring channel. Spacer bars maintain correct framed opening during plastering.



## ONE-LAMP RECESSED DUO-FRAME UNITS



WITH HOLOPHANE CONTROLS\*

\* Holophane Co., Inc.




LAMP SIZE	LENS SIZE	BOX DIMENSIONS			CATALOG NUMBER
		DEPTH	WIDTH	LENGTH	
150W	8½"	7"	10½"	10½"	RS-851-RV
150W	8½"	9½"	10½"	10½"	RS-851-RHV
200-300W	12"	9"	14½"	14½"	RS-121-RH
200-300W	12"	11½"	14½"	14½"	RS-121-RHV

## DUO-FRAME DATA

Die-formed, riveted and welded construction. Two-piece frame. Inner frame mounted to drop hinges—opens easily for servicing. Vertical lamp mounting units (RHV) have Holophane prismatic glass reflectors. Horizontal lamp mounting units (RH) have specular Alzak reflectors. Porcelain sockets. UL approved. Four feet of flex with wire and box connector furnished with all fixtures.

# A HANDY SPECIFYING CHECK-LIST

## SEMI-DIRECT FIXTURES

<b>SLIMLINE "LUVEX"</b> <b>2- AND 4-LAMP</b> 	8" SUSPENSION			24" SUSPENSION			<b>LUVEX DATA</b> <b>APPLICATION</b> —Unit or continuous. <b>MOUNTING</b> Recommended for suspension only. <b>CONSTRUCTION</b> —Die-formed and welded steel. All metal. One-piece enclosure with interlocked louvers. <b>FINISH</b> —HOT-BONDED SUPER-WHITE enamel. <b>WIRING</b> —CBM Certified ballasts. Individually wired. UL approved. Fill-in sections available. 2-Lamp and 4-Lamp 4-Foot Rapid-Start Luvex also available.
	FIXTURE LENGTH	CUT-OFF	CATALOG NUMBER	FIXTURE LENGTH	CUT-OFF	CATALOG NUMBER	
	96½"	35°-25°	<b>96266-8</b>	96½"	35°-25°	<b>96267-8</b>	
	96½"	35°-45°	<b>96296-8</b>	96½"	35°-45°	<b>96297-8</b>	
	96½"	35°-25°	<b>96468-8</b>	96½"	35°-25°	<b>96469-8</b>	
96½"	35°-45°	<b>96498-8</b>	96½"	35°-45°	<b>96499-8</b>		
<b>RAPID-START "VIZ-AID"</b> 	STANDARD FINISH			ALL-WHITE FINISH			<b>VIZ-AID DATA</b> <b>APPLICATION</b> —Unit or continuous. <b>MOUNTING</b> —Surface or suspension. <b>CONSTRUCTION</b> —Die-formed and welded steel. Interlocked louvers. Ribbed Plastic side panels. <b>FINISH</b> —(Standard) Specular Alzak V-center louver. Lateral louvers and chassis in SUPER-WHITE. Enclosure frame in lustre aluminum. (All white) HOT-BONDED SUPER-WHITE enamel throughout. <b>WIRING</b> —CBM Rapid-Start ballasts. Individually wired. UL approved.
	LAMPS	FIXTURE LENGTH	CATALOG NUMBER	LAMPS	FIXTURE LENGTH	CATALOG NUMBER	
	2/4-FT.	49"	<b>46202-4</b>	2/4-FT.	49"	<b>46230-4</b>	
	4/4-FT.	49"	<b>46432-4</b>	4/4-FT.	49"	<b>46462-4</b>	
	ALSO AVAILABLE FOR 4-FOOT RAPID-START LAMPS			ALSO AVAILABLE FOR 4-FOOT RAPID-START LAMPS			
<b>SLIMLINE "PLEXOLINE"</b> <b>2- AND 4-LAMP</b>  <b>LOUVERED</b>	LAMPS	FIXTURE DIMENSIONS			CATALOG NUMBER	<b>LOUVERED PLEXOLINE DATA</b> <b>APPLICATION</b> —Unit or continuous. <b>MOUNTING</b> —Surface or suspension. <b>CONSTRUCTION</b> —Die-formed and welded steel. Enclosure and chassis in one piece, removable louvers completely interlocked. Ribbed Plastic side panels. <b>FINISH</b> —HOT-BONDED SUPER-WHITE enamel. <b>WIRING</b> —CBM certified ballasts. Individually wired. UL approved. Fill-in sections and luminous side circular accent units also available for unlimited lighting patterns. Louvered Plexoline also available in Rapid-Start.	
		LENGTH	WIDTH	DEPTH			
	2/8-FT.	96½"	12¾"	4"	<b>97200-8</b>		
	ALSO AVAILABLE FOR 4-FOOT RAPID-START LAMPS						
	4/8-FT.	96½"	21"	4"	<b>97400-8</b>		
ALSO AVAILABLE FOR 4-FOOT RAPID-START LAMPS							

## INDUSTRIAL FIXTURES

CFI (COMFORT FOR INDUSTRY) DATA				
CFI-10	LAMPS	% UPWARD LIGHT	FIXTURE LENGTH	CATALOG NUMBER
	2/4-FT. R. S.	10%	50"	40211-4
	2/8-FT. R. S.	10%	96 1/4"	80211-8
	2/8-FT. Slim.	10%	96 1/4"	90211-8
	3/4-FT. R. S.	10%	50"	40311-4
CFI-25	3/8-FT. Slim.	10%	96 1/4"	90311-8
	2/4-FT. R. S.	25%	50"	41252-4
	2/8-FT. R. S.	25%	96 1/4"	81252-8
	2/8-FT. Slim.	25%	96 1/4"	91252-8
HYDEE HANGER		HYDEE Hanger with two 5-ft. chains, "S" hooks receptacle and cord clips		CATALOG NO.  9988

## "A-J" ADJUSTABLE HANGER

LENGTH	CATALOG NO.
24"	3314-A
8"	3318-A

Swivel fittings. Over 1" vertical hand-operated adjustment. Hot-Bonded lustrous aluminum enamel finish.

## EXIT SIGNS

SURFACE MOUNTING
SINGLE FACE
1 3/16" x 9 3/16" x 4 3/16"
6" LETTERS
CATALOG NO. 3116

Complete line. Units available for surface, recessed, top and end mounting. Solid or glass bottom. Metal stencil faces, 6" letters without arrow; 5" letters with arrow left, arrow right or double arrow. Red glass. Baked lustrous aluminum finish. Two porcelain sockets for 25-watt A-19 lamps.

## SEE YOUR NEAREST DAY-BRITE DISTRIBUTOR

Your Day-Brite distributor can give you complete information about the items listed on these pages. He carries many of them in stock. Since a Day-Brite specification is always a guarantee of profitable business, it pays to

standardize on Day-Brite. Day-Brite Lighting, Inc., 5402 Bulwer Ave., St. Louis 7, Missouri. In Canada: Amalgamated Electric Corp., Ltd., Toronto 6, Ontario. Distributed only by leading electrical wholesalers.

5457

"DECIDEDLY BETTER"

**DAY-BRITE**  
Lighting Fixtures

TOOLS FOR CRAFTSMEN

# GREENLEE

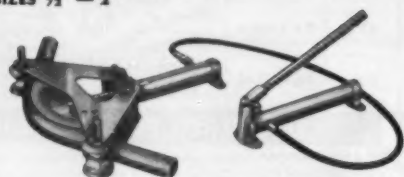


## timesaving tools for electricians

GREENLEE TOOL CO., 1702 COLUMBIA AVENUE, ROCKFORD, ILL.

### HYDRAULIC CONDUIT and PIPE BENDERS

#### No. 880 LIGHTWEIGHT HYDRAULIC BENDER FOR CONDUIT SIZES 1/2" - 2"



Makes a full 90° bend with one stroke of the ram . . . easily portable . . . extra versatile . . . assures uniformity of bends in pipe and conduit of 1/2" through 2" sizes. One man can easily carry and operate the GREENLEE No. 880 Hydraulic Bender — and pipe supports are designed to serve also as rollers for easy moving of the unit. Light, but strong, aluminum alloy is used for many parts for big savings in weight with no sacrifice in strength. Separate two-speed hydraulic hand pump and ram with special speed coupling on the hose and pump for simplified handling, quick setup. Other advanced features include new design of the bending ram so that it will also fit GREENLEE thin-wall conduit, tubing, and bus bar bending attachments. Designed for easy hand operation, the No. 880 can also be teamed with a GREENLEE Power Pump for fast production jobs.

#### No. 770 HYDRAULIC BENDER FOR CONDUIT SIZES 1 1/4" to 3"

Designed for bending conduit and pipe from 1 1/4" to 3-inch size, has a maximum piston pressure of 25 tons for fast, easy bending.

Easily operated by hand or a power pump may be used for large production jobs.

The No. 770 Bender with regular equipment is designed to make bends in 1 1/4", 1 1/2", 2, 2 1/2", and 3-inch conduit or pipe, without the use of heat or filler. Extra attachments available for bending 1/2", 3/4", and 1-inch sizes.



#### No. 775 HYDRAULIC BENDER FOR CONDUIT SIZES UP TO 5"

Similar in design and construction to the No. 770 Bender, but of larger size, heavier weight, and greater hydraulic power.

This GREENLEE Bender, especially designed to bend larger size conduit and pipe, has a maximum pressure of 40 tons and will easily make smooth, precise bends in cold conduit and pipe. Accurately bends 3, 3 1/2, 4, and 5-inch sizes . . . either hand or power pump operated. Extra shoes and supports are available for this machine, making it possible to bend 8 sizes of pipe from 1 1/4" to 5-inch.

#### Nos. 770-T and 775-T THIN-WALL HYDRAULIC CONDUIT BENDERS

Consists of the GREENLEE No. 770 or 775 Power Unit with attachments designed to make a full 90° bend quickly with one forward movement of the ram.

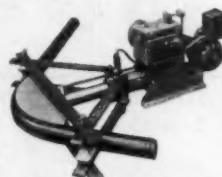
To prevent crushing and kinking of thin-wall material, the conduit is supported by a formed follow bar, which moves with the conduit during the bending operation.

The regular attachment for this machine, which will bend 3/4", 1, 1 1/4", 1 1/2", and 2-inch thin-wall conduit, can easily and quickly be applied to the No. 770 or 775 Power Unit.



#### Nos. 770-BB and 775-BB HYDRAULIC BUS-BAR BENDERS

For making accurate bus bar bends in a wide range of sizes. Consists of either the No. 770 or 775 Power Unit fitted with a GREENLEE bus bar bending attachment. Regular "U" bends, 90° bends, or offsets are easily made in any size bar up to 5 3/4" wide and 1" thick.



#### No. 785-BE POWER BENDER

A powerful portable bender for heavier bending assignments. Develops 100 tons of ram pressure to bend rigid conduit or standard pipe in 1 1/4" to 5" diameters, and is rugged enough to bend 5" extra-heavy or double extra-heavy material with ease. 20" stroke permits 90° bends in one setting. Can be driven by either an electric or gasoline motor. When equipped with an electric motor, a limit switch control system automatically stops the ram at any desired distance to permit making identical bends on a number of pieces.

### POWER PUMPS

#### No. 798-CO POWER PUMP FOR HYDRAULIC BENDERS, PUSHERS, OTHER HYDRAULIC TOOLS

No. 798-CO is a powerful, lightweight, portable power pump for driving GREENLEE Nos. 770, 775, and 880 Pipe Benders, No. 7646A Knockout Punch Driver, and other hydraulic systems.

Pump delivers 22 cubic inches of oil per minute at maximum pressure. It operates at an intermittent pressure of 10,000 psi and a continuous pressure of 6,000 psi. Amount of pressure can be regulated to operating requirements of hydraulic system by adjusting relief valve. Built-in low-pressure pump provides rapid-approach action to the ram and then automatically changes it to slow speed when ram pressure exceeds 100 psi. Pump is powered by a built-in vertical 1/2 hp, 115 volt; a-c — d-c Universal Motor with permanently lubricated bearings. Also available, as No. 798, with a 1/2 hp, 110 volt, single phase constant speed motor delivering 28 cubic inches of oil per minute at maximum pressure. Where electricity is not available, pump is offered as No. 798GM with a 1 1/2 hp gasoline motor.



### HAND BENDERS FOR CONDUIT, TUBING

Forming small-radius bends without flattening or kinking is simple work with a GREENLEE Hand Bender. Especially designed to form neat bends for sharp corners, nooks, and other close quarters. Eliminates many manufactured bends and fittings, saves up to 75% in time and material on many jobs.



#### No. 761 HAND BENDER FOR RIGID CONDUIT (I.P.S.)

For fast, easy bending of pipe or rigid conduit of any metal in 1/8", 1/4", 3/8", and 1/2" nominal sizes.

#### No. 763 HAND BENDER FOR STEEL, COPPER, BRASS, AND ALUMINUM TUBING

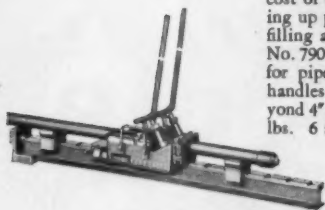
Makes bends quickly, accurately in tubing of brass, copper, and aluminum as well as steel. Bends smoothly on a radius of only 2 1/2 times the diameter, without kinking or flattening. Eight sizes available for bending tubing with outside diameters of 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8" and 1".

#### No. 764 HAND BENDER FOR THIN-WALL CONDUIT (E.M.T.)

For thin-wall conduit, known as E.M.T. (Electrical Metallic Tubing). Quickly bends conduit of 3/8", 1/2" and 3/4" nominal sizes.

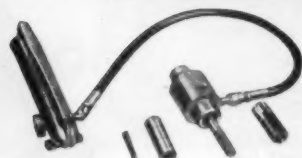


## HYDRAULIC PIPE PUSHERS



With this equipment one man pushes pipe under ground . . . eliminates cost of digging long trenches, tearing up pavements and lawns, back-filling and repaving. Two models: No. 790 has pressure up to 40,000 lbs. for pipe from 3/4" to 4"; No. 795 handles large ducts, pipe, etc., beyond 4", with pressure up to 150,000 lbs. 6 speeds for varying soil conditions. Compact, portable. Hand or power-pump operated.

## HYDRAULIC KNOCKOUT PUNCH DRIVER



An efficient, portable hydraulic unit specifically designed for driving standard GREENLEE Knockout Punches. Developing over eleven tons ram pressure, conduit holes are cut in 10-gauge metal with ease. Cutting holes in tight places is easier, too, for no wrench space is needed.

The Driver handles Knockout Punches for cutting 1/2" to 4" conduit

## GREENLEE KNOCKOUT PUNCHES and CUTTERS



### No. 735 KNOCKOUT PUNCH SET

Permits fast, easy enlarging of knockouts and cutting of holes for conduit in metal boxes and cabinets. Does the job in 1 1/2 minutes or less.

### No. 737 KNOCKOUT PUNCH SET

Similar to the No. 735 set, but consists of only two punches to cut holes for 1 1/2" and 2" conduit. Packed in leather case.

### Nos. 738 and 739 KNOCKOUT PUNCHES

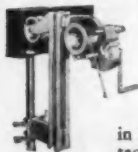
For cutting 3" and 3 1/2" holes to accommodate 2 1/2" and 3" conduit respectively. Punches consist of Punch, Die, Drive Screw, and Drive Nut. The Drive Nut is turned with a wrench when the Punch is set up to enlarge a hole or knockout. Nos. 738 and 739 are packed and sold individually.

### Nos. 741 and 742 KNOCKOUT PUNCHES

For quickly making smooth openings for 3 1/2" and 4" conduit. Hole is clean, no filing of burrs necessary. Operates the same as the Nos. 738 and 739. Consists of Punch, Die, Drive Screw, Drive Nut, and Bushing. Nos. 741 and 742 are packed and sold individually.

### No. 740 KNOCKOUT CUTTER

Companion tool to GREENLEE Knockout Punches. Enlarges knockouts to take 1 1/2, 2, 2 1/2, and 3-inch conduit. Operation is easy, simply turn drive nut with a wrench. Cutting is done by the drive action of two wheel cutters. Special discs can be furnished for cutting odd sizes of holes from 1 1/8 to 3 1/2-inch diameter. Packed in leather case.



### GREENLEE CABLE PULLER

The GREENLEE Cable Puller is a simple, compact unit which exerts up to 7500 lbs. maximum pull. Two speeds. Clamping device fastens directly to conduit — allows pulling in line with conduit, prevents hanger loosening. Attachment for pulling from concealed conduit.

## CABLE PULLERS

## SCREW ANCHOR EXPANDERS



Speeds installation of expansive screw anchors in masonry walls. Sets anchor rapidly and securely . . . regardless of thickness of the masonry. Hole in wall does not have to be drilled to an accurate depth . . . it can go through completely or partially. Just screw anchor onto the expander, insert it into the drilled hole, and strike head of expander with a hammer until anchor is held securely in masonry. Six sizes, for most widely used sizes of screw anchors.

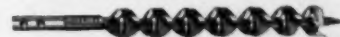
## GREENLEE BORING TOOLS



### Nos. 900 and 925 BIT EXTENSIONS

No. 900 Strong enough to drive a bit up to 1-inch diameter yet small enough to follow a 1/2-inch size. Four lengths.

No. 925 Similar to the No. 900, but made extra heavy to follow a 1 1/16-inch bit and drive tools up to 2-inch size.



### No. 18 UNISPUR ELECTRICIANS' POWER BIT

A fast-boring, double-twist auger bit especially designed for electric drill use, having a twist length of 5 1/2", a shank diameter of 3/4", and an over-all length of 8 1/2".

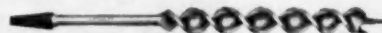
### No. 45 SHORT UNISPUR ELECTRICIANS' POWER BIT

This bit is designed for use with an electric drill. The head and shank details are the same as the No. 18, described above. The twist length is approximately 3", and the over-all length is 6".



### No. 902 POWER BIT EXTENSION

Made in 18 and 24-inch lengths, for use in electric drills. Equipped with 2 setscrews to hold bits with 3/4" shanks.



### No. 16 UNISPUR ELECTRICIANS' AUGER BIT

Smooth-boring, fast double-twist auger bit with long twist and single-cutter head. Fitted with deeply-cut, 10-pitch single screw point for boring one-inch in ten turns. Twist 5 1/2-inches long, over-all length 10 inches for 1 1/8 and larger. Smaller sizes, standard auger bit lengths.



### No. 44 SHORT UNISPUR AUGER BIT

For electricians' and plumbers' use in boring holes for pipe and conduit. Medium-pitch screw point for smaller sizes; finer point for the large. Sizes up to 1-inch have 3-inch twist and 5 1/2-inch over-all length; larger sizes, 2 1/4-inch twist and 5 1/2-inch over-all length.



### No. 21 SOLID-CENTER ELECTRICIANS' AUGER BIT

With solid center to provide full strength for heavy use and positive chip clearance. Made with 5 1/2-inch twist and 10-inch over-all length.



### No. 48 BELL HANGERS' DRILL

Of high-grade alloy steel, heat-treated for additional strength, so that drill will not be damaged if metal is encountered during drilling. Twist length 3 1/4 inches. A 1/2-inch hole is drilled about one inch from point for convenience in pulling wire.



### GREENLEE EXPANSIVE BITS

Fast boring with wide, open throat for positive chip clearance. Two styles: Setfast and plain . . . both in two sizes for boring holes up to 4".

### FREE LITERATURE AND DATA

Write today for descriptive literature and prices on these and the many other timesaving tools for craftsmen.



GREENLEE TOOL CO., 1749 COLUMBIA AVE., ROCKFORD, ILL.

# Index of midwest ELECTRICAL FITTINGS FOR YOUR WIRING REQUIREMENTS

THE ITEMS LISTED HERE are manufactured under the strictest quality conditions. Extra inspection and finishing steps are involved to insure that Midwest Electrical fittings are strong, produced within close tolerances, and completely finished to give you snag-proof material for your wiring jobs.

We invite you to check this list of electrical fittings and write us direct for a complete illustrated catalog.



**A**  
Adapters, Thin Wall Conduit  
Adjustable, Copper Ground Fittings  
Angle Conduit Elbows  
Angle Connectors for,  
Armored Cable  
Flexible Metallic Conduit  
Non-Metallic Cable



**B**  
Benders for,  
Rigid Conduit  
Thin Wall Conduit  
Box Connectors  
Bushings  
Capped  
Grounding  
Insulating  
Standard



**C**  
Cable Clamps  
Cable Clips  
Cable Connectors  
Armored, Angle  
Armored, Squeeze  
Armored, Two Screw  
Non-Metallic, Angle  
Non-Metallic, Squeeze  
Non-Metallic, Two Screw  
Service Entrance, Non-Water Tight  
Service Entrance, Water Tight,  
Nut Type

Service Entrance, Water Tight,  
Two Screw Type  
Cable Entrance Heads  
Cable Hangers  
Cable Insulators  
Cable Staples  
Cable Straps  
Capped Bushings  
Capped Elbows  
Caps, Entrance  
Clamps for,  
Armored Cable  
Rigid Conduit  
Service Entrance Cable  
Thin Wall Conduit  
Combination Couplings for Rigid  
Conduit  
Combination Couplings for Thin Wall  
Conduit  
Connectors for,  
Armored Cable, Angle  
Armored Cable, Set Screw  
Armored Cable, Squeeze  
Armored Cable, Two Screw  
Duplex, Set Screw  
Duplex, Two Screw  
Flexible Metallic Conduit, Angle  
Flexible Metallic Conduit, Set Screw  
Flexible Metallic Conduit, Squeeze  
Flexible Metallic Conduit, Two Screw  
Non-Metallic Cable, Angle  
Non-Metallic Cable, Squeeze  
Non-Metallic Cable, Two Screw  
Service Entrance Cable, Non-  
Watertight  
Service Entrance Cable, Watertight,  
Nut Type  
Service Entrance Cable, Watertight,  
Two Screw Type  
Thin Wall Conduit, "Bead" Type  
Thin Wall Conduit, "Compression"  
Type  
Thin Wall Conduit, Indenter Type  
Thin Wall Conduit, Set Screw Type  
Couplings  
Combination

Rigid Conduit  
Thin Wall Conduit "Bead" Type  
Thin Wall Conduit "Compression"  
Type  
Thin Wall Conduit, Indenter Type  
Thin Wall Conduit, Set Screw Type



**D**  
Duplex Connector  
Set Screw  
Two Screw



**E**  
Elbows  
Capped  
Grounding  
Service Entrance  
Long 90-Degree for Rigid Conduit  
Short 90-Degree for Rigid Conduit  
Short 90-Degree for Thin Wall  
Conduit

Entrance Caps for,  
Flanged Type  
Rigid Conduit  
Service Entrance Cable  
Thin Wall Conduit "Bead" Type  
Thin Wall Conduit "Compression"  
Type  
Entrance Elbows,  
Capped  
Grounding  
Lock-Cover  
Extension Pieces, Fixture



**F**  
Fish Tape  
Fixture Fittings  
Combination Stud  
Extension Pieces  
Hickeys  
No-Bolt Studs  
Nuts  
Flanged Entrance Head  
Flexible Metallic Conduit Fittings  
Angle Connectors  
Combination Couplings  
Set Screw Connectors  
Squeeze Connectors  
Two-Screw Connectors



**G**  
Ground Fittings for,  
Armored Cable  
Bare or Insulated Wire  
Rigid Conduit  
Thin Wall Conduit  
Ground Straps, Copper  
Grounding Bushings  
Grounding Locknuts  
Grounding Service Entrance Elbows



**H**  
Hangers  
Cable  
Conduit  
Hickeys, Fixture



★ THE MIDWEST CATALOG . . . a standard  
reference manual for electrical fittings.



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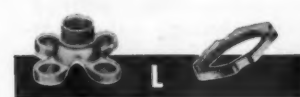
**Insulating Bushings**  
Insulators for,  
Armored Cable  
Non-Metallic Cable  
Rigid Conduit



**Jiffy Conduit Straps**



**Knockout Couplings**  
Knockout Reducers  
Knockout Closers



**Lighting Fixture Fittings**  
Locknuts



**Nipples**  
Bushed  
Offset

**Threaded**  
Non-Metallic Cable Fittings,  
Angle Connectors  
Clips  
Squeeze Connectors  
Staples  
Straps  
Two Screw Connectors



**Offset Nipples**  
Outlet Box Connectors



**Perforated Strap Coils**  
Perforated Strap—Straight Lengths  
Porcelain Bushings



**Reducing Washers**  
Rigid Conduit Fittings  
Bender  
Bushed Nipples  
Bushings  
Capped Bushings  
Clamps  
Combination Couplings  
Couplings  
Entrance Caps  
Entrance Elbows  
Ground Fittings  
Grounding Bushings

**Grounding Locknuts**  
Insulating Bushings  
Knockout Couplings  
Long Elbows—90 Degree  
Locknuts  
Reducers  
Short Elbows, 90-Degree  
Threaded Nipples  
Unions  
Wood Plugs



**Service Entrance Cable Fittings**  
Clamps  
Connectors, Non-Water Tight  
Connectors, Water Tight, Nut Type  
Connectors, Water Tight, Two Screw  
Type  
Heads  
Sill Plates  
Set Screw Connectors for,  
Armored Cable  
Flexible Metallic Conduit  
Thin Wall Conduit  
Sill Plates  
Split Steel Adapters, Thin Wall  
Conduit  
Squeeze Connectors for,  
Armored Cable, Angle  
Armored Cable, Straight  
Flexible Metallic Conduit, Angle  
Non-Metallic Cable, Angle  
Non-Metallic Cable, Straight  
Rubber Covered Wire  
Staples  
Straps for,  
Non-Metallic Cable  
Perforated  
Rigid Conduit  
Thin Wall Conduit

**Studs**  
Hickey  
No-Bolt



**Tape, Fish**  
Thin Wall Conduit Fittings,  
Adapters  
Beading Tools  
Bender  
Connectors "Bead" Type  
Connectors, "Compression" Type  
Connectors, Set Screw Type  
Connectors, Indenter Type  
Couplings, "Bead" Type  
Couplings, Set Screw Type  
Couplings, Indenter Type  
Couplings, "Compression" Type  
Combination Couplings  
Entrance Heads, "Bead" Type  
Entrance Heads, "Compression"  
Type  
Short Elbows, 90-Degree



**Washers, Reducing**  
Water Tight Connectors for,  
Service Entrance Cable, Nut Type  
Service Entrance Cable, Two Screw  
Type  
Wood Conduit Plugs

manufacturers for  
over 30 years



Sold Through  
Electrical Wholesalers

**Midwest Electric Mfg. Company**

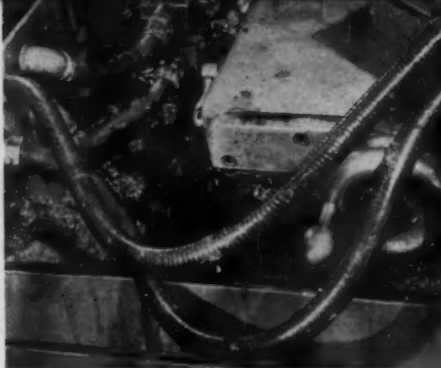
MANUFACTURERS OF ELECTRICAL WIRING PRODUCTS

1414 N. WALTON STREET  
CHICAGO 12, ILLINOIS





Sealtite resists corrosive mixture of powdered calcium sulphate, magnesium oxide and magnesium chloride.



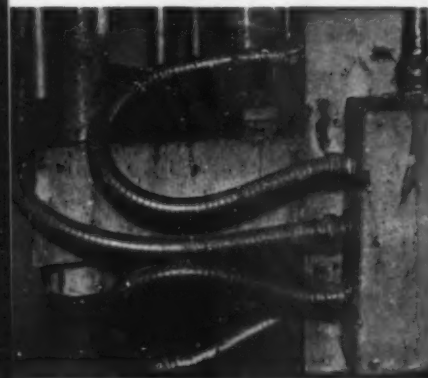
Sealtite protects grinder motor leads . . . flexes continuously under abrasive coat of metal dust, oil and coolant.



In paper mill's steamy air, Sealtite is covered with oil and wet pulp containing chlorine and caustic soda.

Give the dirtiest jobs to

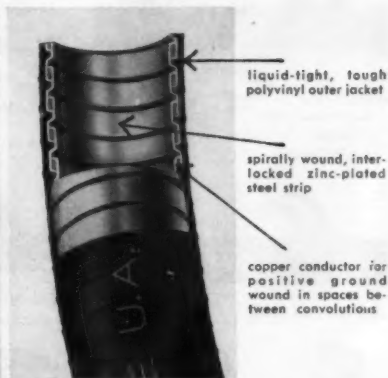
# SEALTITE flexible, liquid-tight conduit



Sealtite makes tight bends on hydraulic press, keeps motor leads free from oil, grease and water.



Sealtite keeps weather out of leads to outdoor pump motor.



Cutaway shows construction details of Sealtite Type UA.

Sealtite is made in two types. Specifications in table below. Type UA is approved by Underwriters' Laboratory for service in wet spots. Available in light gray as well as black.

Type EF\* meets JIC standards. Extra flexible . . . ideal for machine tool applications. Standard stock colors: black, and machine tool light gray at no extra cost.

## SEALTITE TYPE E. F.

Trade Size (In.)	INSIDE DIAMETER (Inches)		OUTSIDE DIAMETER (Inches)		Appr. Inside Bend Diam. (In.)	Est. Wgt. (Lbs. Per 100 Feet)	Feet Per Std. Coil
	Min.	Max.	Min.	Max.			
3/4	.483	.505	.690	.710	5	24.0	250
1/2	.620	.640	.820	.840	6	29.0	200
3/8	.815	.835	1.030	1.050	9	38.5	200
1	1.030	1.055	1.290	1.315	10	68.0	100
1 1/4	1.370	1.395	1.630	1.655	13	86.0	100
1 1/2	1.575	1.600	1.875	1.900	15	117.0	50
2	2.020	2.045	2.350	2.375	17	153.0	50
2 1/2	2.480	2.505	2.850	2.875	20	198.0	—
3	3.070	3.095	3.470	3.500	27	282.0	—
4	4.000	4.050	4.465	4.500	34	414.5	—

## SEALTITE TYPE U. A.

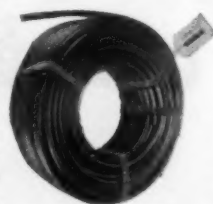
Trade Size (In.)	INSIDE DIAMETER (Inches)		OUTSIDE DIAMETER (Inches)		Appr. Inside Bend Diam. (In.)	Est. Wgt. (Lbs. Per 100 Feet)	Feet Per Std. Coil
	Min.	Max.	Min.	Max.			
3/4	.484	.504	.690	.710	6	30.0	200
1/2	.622	.642	.820	.840	10	36.6	200
3/8	.820	.840	1.030	1.050	15	48.2	150
1	1.041	1.066	1.290	1.315	18	87.7	100
1 1/4	1.380	1.410	1.630	1.660	21	116.5	50

Sealtite\* flexible, liquid-tight conduit gives wiring maximum protection against oil, grease, water, dirt, chemicals, corrosive atmospheres and weather. Nothing gets through its tough, polyvinyl outer covering. It stands up under continuous flexing . . . absorbs vibration, connects moving parts . . . connects misaligned outlets . . . prevents burn-outs. For long runs or short leads it's easy to install . . . saves the time it would take you to cut, bend and fit rigid conduit.

**ELECTRICAL WHOLESALERS** stock Sealtite in easy-to-handle coils. Buy it this way in long lengths . . . cut it on the job without waste. Your electrical wholesaler also stocks liquid-tight connectors. For more information write for Sealtite bulletins. Address *The American Brass Company, American Metal Hose Branch, Waterbury 20, Conn.*

\*Trade Mark  
†Pat. App. For

55102

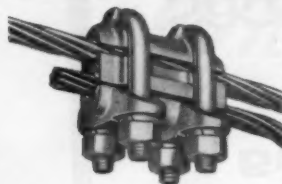


**SEALTITE** FLEXIBLE, LIQUID-TIGHT CONDUIT

AN **ANACONDA**® PRODUCT

# BLACKBURN'S QUALITY LINE

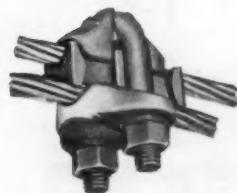
## ALUMINUM FITTINGS



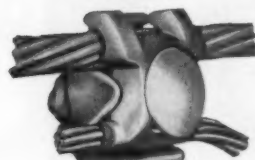
TYPE 2U



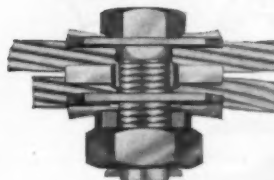
TYPE PAC



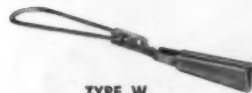
TYPE DLC



TYPE PAA



TYPE AAW & CA



TYPE W

## GROUNDING DEVICES

WRITE  
FOR FREE  
CATALOG



COPPER BONDED  
GROUND RODS  
Sectional & Regular



## HIGH PRESSURE CONNECTIONS FOR COPPER



TYPE H



TYPE 2B



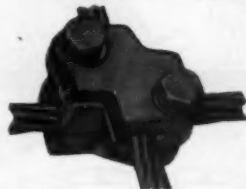
TYPE N



TYPE 5

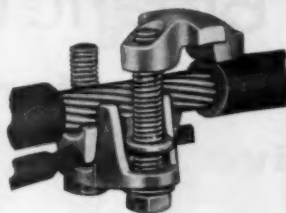


TYPE PC 250



TYPE XT

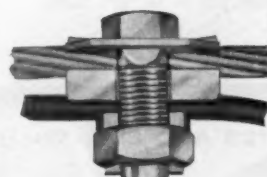
## GENERAL PURPOSE CONNECTORS



TYPE 2B-PW



TYPE NPW



TYPE HPW



TYPE PC 250-P



TYPE XT-P



TYPE GP-100



TYPE GGH



TYPE GG



TYPE G

## TERMINAL LUGS AND SPLICERS



TYPE L



TYPE LH



TYPE L2



TYPE LH2



TYPE TL



TYPE TLH



SPLICER

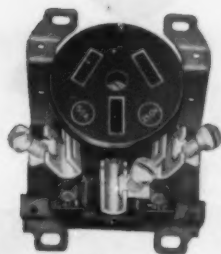
JASPER BLACKBURN CORP. • 35 Madison St. • St. Louis 6, Mo. • Phone MAin 1-2821  
STOCKED BY LEADING ELECTRICAL DISTRIBUTORS

# These Bryant Wiring Devices

## cut installation costs

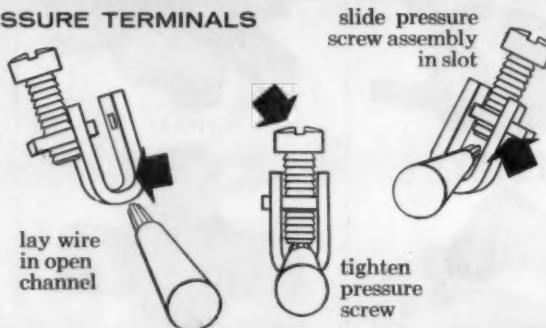
## give faster, easier wiring

### NO. 3845 WITH PRESSURE TERMINALS

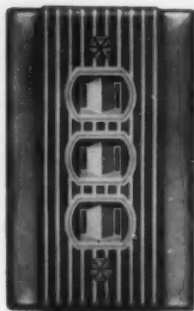


50 AMP. 250 V.

Left and right hand channels are set at an outward angle so that wire can be inserted *without* removing upper portion of receptacle. Screw assemblies are permanently attached to channels... no loose parts to get lost!



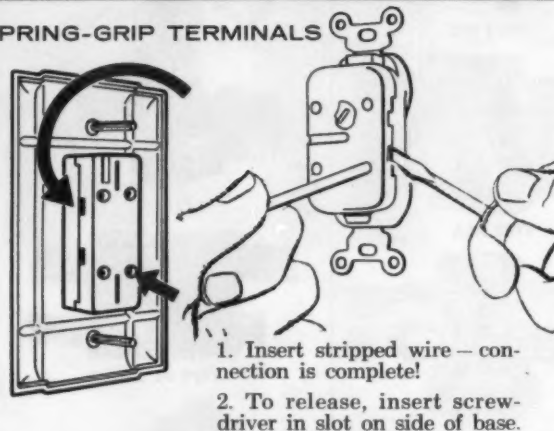
### NO. 6123 AND 6100 WITH SPRING-GRIP TERMINALS



15 AMP. 125 V.



One step operation with these time - saving, cost - cutting screwless terminals... for easier, more efficient wiring jobs.



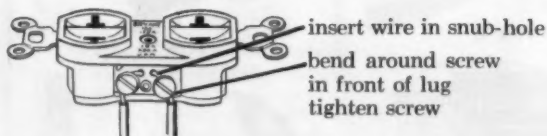
### NO. 4832 WITH HOLE SNUB WIRING



15 AMP. 125 V. 10 A. 250 V.

Snub-hole method of wiring assures a positive connection.

Easy wiring combined with the most secure way to attach conductors!



insert wire in snub-hole  
bend around screw  
in front of lug  
tighten screw

Listed by  
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J-99945

## THE BRYANT ELECTRIC COMPANY

Bridgeport 2, Connecticut

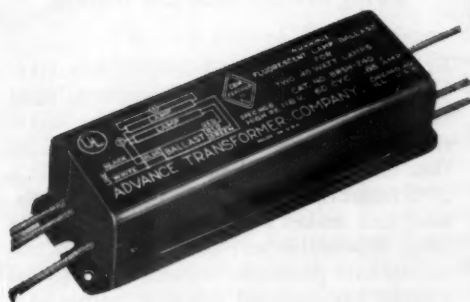
Chicago - Los Angeles



*When you Specify...*

# ADVANCE BALLASTS

**IT'S AS EASY  
AS.....**



**ADVANCE  
.....BALLASTS  
are  
.....CERTIFIED**



*Designed & Engineered  
BY THE  
WORLD'S LARGEST MANUFACTURER  
DEVOTED Exclusively TO THE PRODUCTION OF  
FLUORESCENT LAMP BALLASTS*

**Cable Address "ADTRANS"  
2950 N. WESTERN AVENUE, CHICAGO 18, ILLINOIS, U.S.A.**

# Know What's New



## New SILENT Mercury Switch

with lighted handle as added feature . . .  
has extra long life



Single Pole

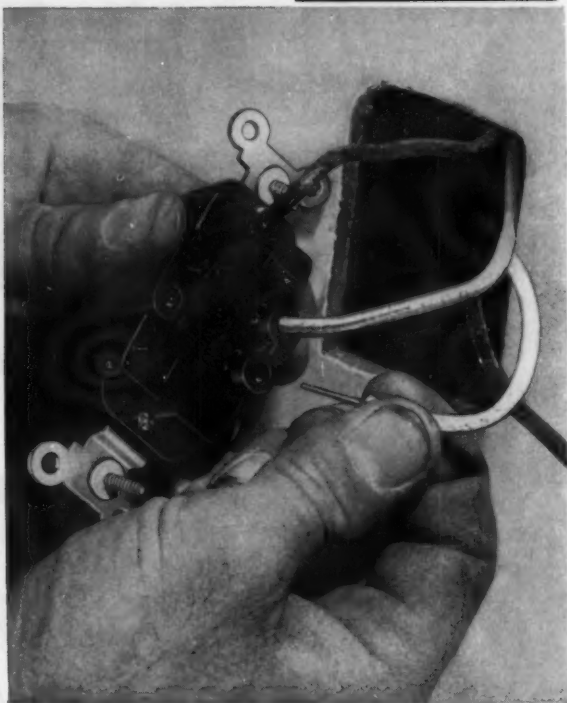


Three-Way

Turns lights ON and OFF without making any sound at all. When light is OFF, a tiny neon lamp inside the handle goes on . . . makes this G-E Silent Mercury Switch easy to locate at night. Will give years of service under normal usage. Cost of operation varies with electrical rates but, on an average, is less than 1¢ a year.

As in all G-E Mercury Switches, a quiet pool of mercury makes or breaks the circuit. There is no mechanical action to wear out. Fewer parts to wear mean longer switch life. Life tests on these switches have run a million cycles without failure.

Ideal for installation at home entrances, in hallways, bedrooms, bathrooms, hospital rooms, hotel rooms, and motels . . . all locations where a soft light will help to spot the switch in the dark.



## PRESSURE-LOCK Terminals

G-E offers a complete line of  
wiring devices with this feature



30 Switches



18 Outlets



3 Coiling  
Lampholders

In outlets, switches, and lampholders, General Electric offers the most complete line of devices with pressure-lock terminals. This is the new wiring method, developed by G.E., that eliminates binding screws, provides a 20% better contact, simplifies device installation, and makes a pressure connection for long, dependable service. Pressure-lock terminals have proved so valuable that General Electric has extended this new feature to a wide range of devices.

Pressure-lock terminals make wiring easy, whether you use No. 10, No. 12, or No. 14 Awg. wire. Just strip off the insulation, push wire into the terminal openings, and the G-E pressure-lock terminal grips the wire for a firm, dependable connection. Wires can be removed easily from terminals simply by inserting a screwdriver into release slots.

# -You'll Profit More



These are just a few of the new products developed by General Electric to help the electrical contractor do a better wiring job, more easily.

**Ask your G-E distributor to show you** some of the many new features that have been added to General Electric Wiring Devices. Here are features that consumers as well as contractors appreciate. Product improvements that build demand for the quality lines — like the new Lighted Handle on the popular Silent Mercury Switch, and Pressure-Lock terminals on complete lines of G-E devices, including the new Surface Wiring line.

**You can depend on General Electric —** for the newest developments in wiring devices, for quality products, and a breadth of line that includes everything needed to handle wiring jobs — commercial or industrial, residential or rural. In short, you can depend on G.E. for *more profit*—every time!

**See the complete line of G-E Wiring Devices** at your distributor's. It's constantly expanding, and every new product or product improvement is designed to make your wiring job easier, to increase your profit on every job, and add to your prestige as an electrical contractor. Wiring Device Dept., General Electric Co., Providence 7, R. I.



Double Outlet



Single Pole Switch



Keyless Lampholder



Pull Chain Lampholder



Lampholder w/outlet

## New SURFACE WIRING Devices with Pressure-Lock terminals cut costs

The G-E line of Surface-Mounted Devices with Pressure-Lock Terminals is designed for low-cost wiring ease. Devices are totally enclosed . . . no exposed current-carrying parts, and no parts to disassemble. Pressure-Lock terminals give firm, positive electrical and mechanical connection.

To wire, simply strip non-metallic cable to gage on back of each device. Insert screw driver in slot at desired end of device and remove plastic pryout. Insert stripped cable in opening, push cable until locked in place by pressure-lock terminals . . . pull cables to make sure of firm seating. Staple each cable within 6 inches of device, fasten device to surface with wood screws provided.

**Just off the press!** New General Electric Wiring Device catalog. Completely revised, simplified, and up-to-date. Contains all essential data on the complete line of G-E wiring devices. Indexed for quick reference. Send for your copy of this authoritative, easy-to-use buying guide. It's free. Write today.



*Progress Is Our Most Important Product*

**GENERAL  ELECTRIC**





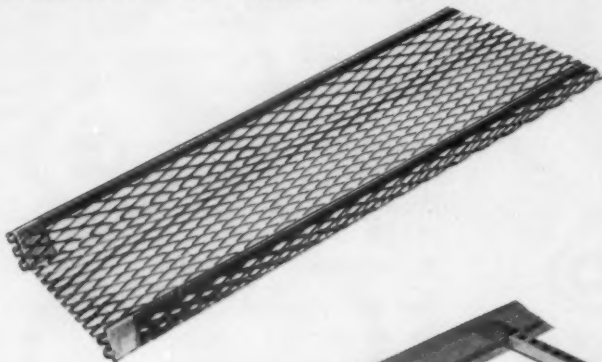
## STANDARD CABLE SUPPORTS

This Cope quickly-erected, standardized system is ideal for supporting runs of power, signal and control cables in industrial plants and power generating stations. All units in the Cope system are equipped with the new Pin-type coupler which permits sections to be joined together in a matter of seconds to form a strong mechanical joint with-

out the use of nuts, bolts or washers.

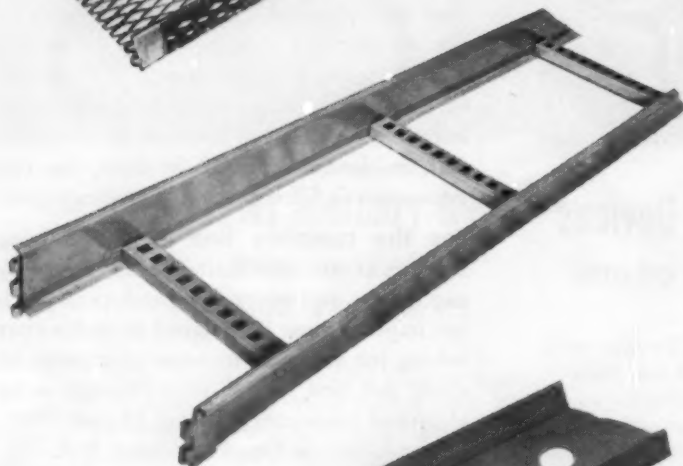
Cope also supplies a complete line of mounting brackets for Trough, Channel and Ladder which can be hung from almost any structural member.

For complete information, write for Bulletin 67 and 67A.



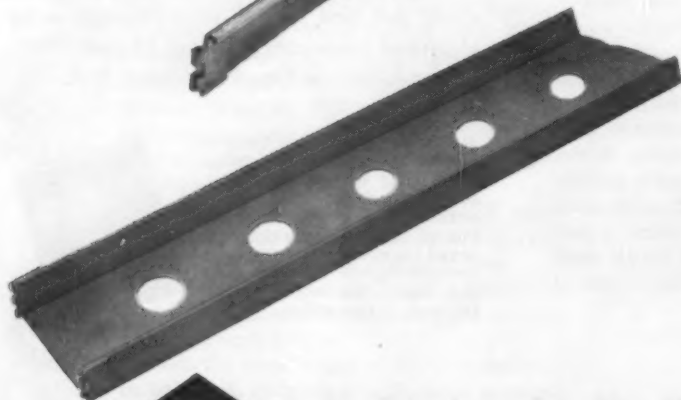
### CABLE TROUGH

The popular expanded metal Cable Trough is ideal for supporting runs of non-metallic jacketed cables where continuous support is required. The trough is supplied in widths of 6", 9", 12", 18" and 24" and lengths of 8, 10 and 12 feet. Standard fittings for each width permit the trough to make changes in direction and elevation, join and cross, and, in short, conform to any plant layout.



### CABLE LADDER

This new Cope product has been developed specifically for the support of armor and other semi-rigid cables which require only intermittent support. Basically, the Cope Galvanized Steel Ladder consists of two main "Z" shaped stringers to which rungs are welded on 18" centers. The rungs are suitably slotted to permit cables to be quickly clamped to them with simple band type cable straps and pads. Cope Cable Ladder is supplied in widths of 6", 9", 12", 16", 18", 20" and 24" and in 12 foot lengths. Ladder sections have been designed to connect with Cable Trough of similar width. Horizontal and vertical fittings for all widths are standard items.



### CABLE CHANNEL

The Cope Cable channel has been designed to supplement ladder and trough by providing an economical means of supporting a limited number of armored or non-metallic jacketed cables—such as would occur in branch runs, etc.

Cope channel is available in 12 foot lengths in widths of 3" and 4". All sections except vertical risers are provided with ventilation and drainage holes. Horizontal and vertical fittings are also available.



**T. J. COPE, INC.**

**711 SOUTH 50th ST., PHILADELPHIA 43, PA.**

## CABLE INSTALLATION EQUIPMENT

For over 65 years Cope has been supplying an extremely wide range of underground and aerial cable installation equipment, some of which is illustrated below. Other items in the line include

conduit cleaning equipment, soldering equipment, Aerial Tents, Manhole Guard Rails, Pipe Ripper, Cable Benders, Wire Raising Tools, etc. Complete information is contained in Bulletin 65.



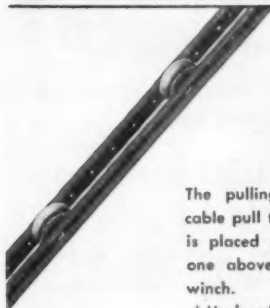
### PNEUMATIC FISHLINE

The Cope Pneumatic Fishline is essentially a powerful air-gun which uses conduit as its barrel. This makes it possible to fish underground conduit in a matter of minutes—no hours—regardless of diameter or length. Air-operated retrieving motor permit fast rereeling. Projectile consists of neoprene cup mounted on a steel rod with eyes on both ends. Standard sizes are 3" to 3½"; 4" to 4½"; and 5" to 5½"; other sizes can be made to order.



### CONDUIT RODS

These rods are turned from straight-grained hickory penta treated, carefully seasoned, and selected before assembly. Couplings are high-grade malleable iron machined and checked against master patterns before being forced on and riveted to sticks. Supplied in 2', 3' and 4' lengths with a straight shaft of 1" diameter.



### CABLE PULLING RIGGING

The pulling rigging provides for a direct cable pull through the duct. The lower sheave is placed opposite the duct and the upper one above the street level to lead to the winch.

\* Made of 6" steel channel with holes on 8½" centers. Sheaves are supplied from 4" to 2" and will accommodate 3½" cable.



### CABLE FEEDER

The Cope Cable Feeder is used to guide and protect the cable as it is being pulled from the reel into the duct, and to facilitate the application of lubricant. Made in 4" and 5" O. D. size from heavy steel galvanized flexible tubing with a smooth-finished brass bell at the free end and a duct nozzle at the bottom end. Nozzles range from 2" to 5" in ½" increments. Feeder lengths from 9' to 20'.



### WARNING SIGNS

The Cope Warning Sign is an extremely rugged piece of equipment, built to stand up in the hardest service. Its 18" x 18" panel is mounted in a structural steel welded frame and its legs are pivoted but may be locked in an open or closed position. It is an ideal highway sign, brilliant yellow panel, black letters 5" high, galvanized frame, and heavy enough to stand up in high wind.

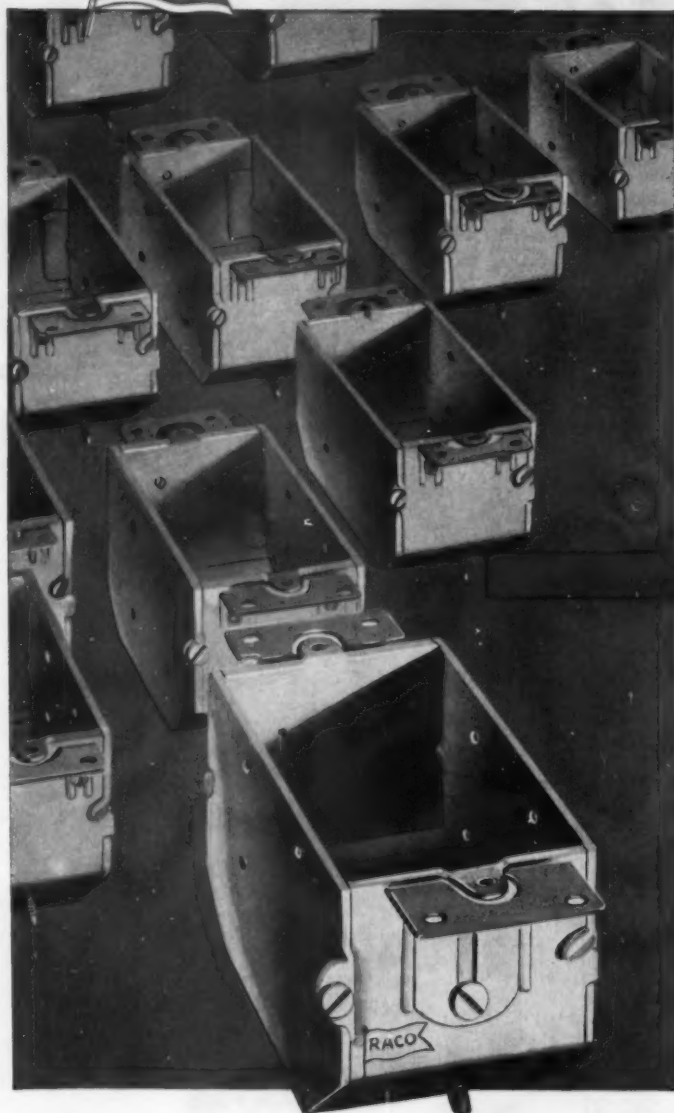


### MANHOLE GUARD RAIL

Cope Guard Rails are simple in design, light enough to be handled easily, yet heavy enough to withstand hard use. The one illustrated is made of ¾" steel pipe, and all fixed joints are welded. Sleeves and hinges are of seamless steel tubing. Equipped with a wing bow brace, two chains, and flag holder. Sign panel optional. Finished in red enamel.



**You can always rely on RACO**



# ELECTRICAL BOXES MAY LOOK ALIKE...

**Only RACO Assures  
You All these Benefits**

## mechanical details

carefully engineered in excess of national and local code requirements.

## electrolytic zinc plating

with a fine clean, neat appearing permanent silvery finish.

## best materials

full gauge steel ... excellent screws  
... precision-fit covers and clamps.

## superior service

Your order receives immediate attention at Raco ... Scheduled for shipment at once.

## efficient packaging

for easy handling, storage and inventorying. In hard fiber cartons approved for export.

## complete line

of all types and sizes of switch and outlet boxes, covers, clamps, bar hangers, brackets.

## new RACO switch box grippers

Install any type box with plaster ears in any type of wall in a few seconds. Save time, save money.

**write department EC for complete information**

**"A BOX FOR EVERY NEED"**



**RACO ALL-STEEL EQUIPMENT INC., Aurora, Illinois**





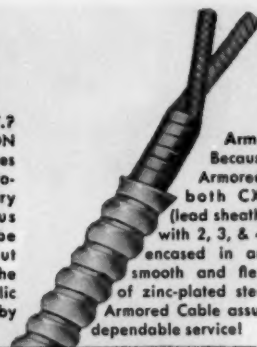
**Why**

**CLIFTON Rigid Conduit?**  
Because only **CLIFTON Conduit** has the extra protection of a heavy zinc coating on both the inside and the outside . . . applied by Clifton's special hot-dip method!



**Why**

**CLIFTON E.M.T.?**  
Because **CLIFTON** hot-dip E.M.T. gives double the zinc protection of ordinary E.M.T.! This famous **CLIFTON** tubing can be bent and angled without chipping and flaking. It is the most durable electrical metallic tubing made and is distinctive by its brightness!



**Why**

**CLIFTON Armored Cable?**  
Because **CLIFTON Armored Cable** in both CX and CXL (lead sheathed) is made with 2, 3, & 4 conductors encased in an extremely smooth and flexible armor of zinc-plated steel. **CLIFTON Armored Cable** assures years of dependable service!



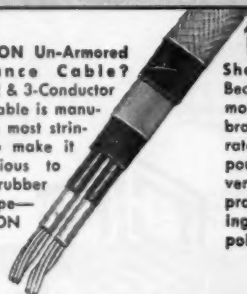
**Power and Light Lines**

**are the Lifelines Everywhere . . .**

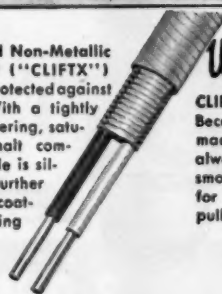
**and CLIFTON CONDUIT Carries the Load Best!**



**Why CLIFTON Un-Armored Service Entrance Cable?**  
Because **CLIFTON 2 & 3-Conductor Service Entrance Cable** is manufactured under the most stringent conditions to make it absolutely impervious to moisture! Special rubber coated "Mylar" tape—is used in all **CLIFTON Service Entrance Cable**!



**Why CLIFTON Non-Metallic Sheathed Cable? ("CLIFTX")**  
Because "**CLIFTX**" is protected against moisture and rot. With a tightly braided fibreglas covering, saturated with an asphalt compound, **CLIFTON** cable is silver finished and further protected with a thin coating of high-melting point wax.



**Why**

**CLIFTON Flexible Steel Conduit?**  
Because **Clifton Flexible Cable** is made in such a manner as to always have a more uniformly smoother surface. This makes for easier handling and pulling!



**WRITE TODAY**  
**For Full Information**

**Warehouses Throughout the Country.**

**REPRESENTATIVES**  
**IN PRINCIPAL CITIES**

**Clifton**

**CONDUIT COMPANY, INC.**

**MAIN OFFICE**  
**75 Montgomery St.**  
**Jersey City 2, N. J.**

**FACTORIES**  
**MEMPHIS**  
**Tennessee**  
**BALTIMORE**  
**Maryland**

**WIRE CABLE RIGID CONDUIT ELECTRIC METALLIC TUBING CLIFALL UP**

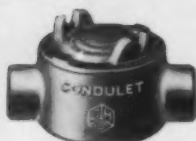
**ELECTRICAL CONSTRUCTION AND MAINTENANCE . . . MID-SEPTEMBER, 1955**

**115**

# Quality



Explosion-Proof Conduit for Pulling Cable, Type LBH



Explosion-Proof Junction Conduit, Type GUAC



Explosion-Proof Flexible Coupling, Type ECJ



Explosion-Proof Junction Conduit with Union Hubs, Type GUAG



Obround Conduit, Type LB



Type FS Conduit with Cover and Wiring Devices



Explosion-Proof Delayed Action Arklite Plug Receptacle Equipment, Type CES



Arklite Receptacle with Spring Door, Type ARE



Arklite Plug with Clamping Ring, Type APJ



Explosion-Proof Push Button Switch Conduit, Type EFS



Explosion-Proof Interlocked Plug Receptacle and Switch Conduit with Spring Door, Type FSQC



Dust-Tight Panelboard with Circuit Breakers, Type DVP



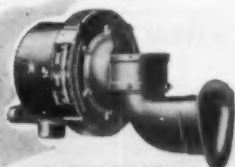
Explosion-Proof Combination Motor Starter and Circuit Breaker Conduit, Type EPC



Explosion-Proof Time Delay Low Voltage Release Push Button Station Type OFC



Explosion-Proof Circuit Breaker Conduit, Type FLB



Explosion-Proof Horn Signal, Type ETH



Explosion-Proof Desk Type Telephone, Type ETDA



A  
NATIONWIDE  
DISTRIBUTION  
exclusively through  
ELECTRICAL  
DISTRIBUTORS

CONDULETS

\*CONDULET is a coined word registered in the U.S. Patent Office. It designates a product made only by Crouse-Hinds Company.



Quality *does* count in every electrical conduit installation you make. When you use Condulets you know you are putting in electrical equipment of the highest quality because Condulets have been doubly tested . . . in the factory and in the field.

Crouse-Hinds quality control assures a long-lasting product and field records prove it by the test that only time can give. Thousands of Condulet installations are still in tip-top condition after twenty, thirty, or even more than forty years of dependable service.

The Condulet Catalog lists thousands of types and sizes of Condulets, lighting fixtures, plugs and receptacles, switches, controls, circuit breakers and panelboards for use in ordinary and hazardous locations. There are over 600 distributors throughout the country ready to serve and help you with your electrical installations. Crouse-Hinds engineers will gladly make specific recommendations on any of your electrical problems.

Where quality counts you *can* count on Condulets. They're made right . . . to serve you better . . . and last longer.



Vaportight Lighting Fixture with Reflector, Type VDA



Vaportight Industrial Lighting Fixture, Type VC



Vaportight Portable Hand Lamp, Type VS



Explosion-Proof Fixture For Fluorescent Lamps, Type EVF



Explosion-Proof Fixture Hanger with Threaded Hub, Type EFHC



Explosion-Proof Lighting Fixture, Type EVA



Sports Floodlight for 1500-W. Lamps, Type FLA



Heavy Duty Industrial Floodlights for 200-2000-W. Lamps, Types ADE and LCE



General Purpose Floodlights for 200-1000-Watt Lamps, Type MDB



Explosion-Proof 150-W. Portable Floodlight, Type RCDR-6



Explosion-Proof 300-W. Floodlight, Type RLEE-14

# ROUSE-HINDS COMPANY

SYRACUSE 1, N. Y.

OFFICES Birmingham Boston Buffalo Chicago Cincinnati Cleveland Dallas Denver Detroit Houston Indianapolis Kansas City Los Angeles Memphis Milwaukee New Orleans New York Philadelphia Pittsburgh Portland, Ore. St. Louis St. Paul San Francisco Seattle Tulsa Washington  
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Crouse-Hinds Company of Canada, Ltd. Toronto, Ont.

FLOODLIGHTS

TRAFFIC SIGNALS

AIRPORT LIGHTING





## COPALAM

CLASS B

### Electrical Insulating Material

#### PHYSICAL PROPERTIES

Thicknesses: .010", .015", .020", .025"

The .010" and .015" thicknesses consist of an inorganic fiberglass base with a flexible polyester thermosetting resin. The .020" and .025" thicknesses are a sandwich material of glass-asbestos-glass.

Dielectric strength: 600 volts per mil minimum

Elongation: 3.5%

Impact strength: Very good

Arc resistance: Very good

#### GENERAL

Good flexibility combined with high tensile strength makes Copalam outstanding for the formation of slot cells without loss of its electrical resistance properties.

May be cut, punched and creased without delamination or fraying.

Will not become brittle or lose its attributes under indefinite storage at Class B temperatures.

High resistance to moisture.

Available in 36 x 36" sheets or in subdivisions thereof.



Write for literature  
and free sample.

**ATLANTA 5, GA.**  
Brownell Distributors, Inc.  
690 Murphy Ave., S.W.  
**BOSTON 19, MASS.**  
The Huse-Liberty Mica Co.  
3012 Washington St.  
**CHICAGO 6, ILL.**  
Federal Insulation Co., 148 N. Clinton St.  
**CLEVELAND 7, OHIO**  
Mr. C. J. Vanaman, 14237 Detroit Ave.  
**DALLAS, TEXAS**  
Electrical Supply Corp.  
1101-07 McKinney Ave.  
Sumner Electric Co., 2001 Griffin St.  
**DENVER 2, COLORADO**  
Electric Motor Supply Co., 1646 Blake St.  
**EAST RUTHERFORD, N. J.**  
Insulating Fabricators, Inc.  
**FORT WORTH, TEXAS**  
Electrical Supply Corp., 1511 N. Lake St.  
**HAMILTON, ONTARIO**  
Buntin, Gillies & Co., Ltd., 69 John St., So.  
**HOUSTON 3, TEXAS**  
Houston Industrial Supply Co., 1101 Chenevert  
**KANSAS CITY 8, MO.**  
Aca Electric Co., 419 East 31st St.  
**LOS ANGELES 13, CALIF.**  
Tri-State Supply Corp., 544 So. San Pedro St.



## COPACO

CLASS A

### Electrical Insulating Paper

#### PHYSICAL PROPERTIES

Thicknesses: .005", .007", .010", .012", .015", .020", .025", .030"

Dielectric strength: 300 volts per mil minimum

Tensile strength: 13,000 to 16,000 lbs. sq. in.

pH-7.0: Methanol extractables — 0.15-0.20

Density: 1.30-1.35

#### GENERAL

Made from 100% rag stock with no sizing, clay, fillers or other chemical additives used.

Widely used in hermetic motors.

Easily combined with other materials such as varnished cambric, cellulose acetate and high dielectric films.

Furnished with a "glazed roll" finish on both sides.

Available unfinished or finished one side only on application.



Write for literature  
and free sample.

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Russell Electric Co., 1250 So. Washington Ave.  
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Brownell Distributors, Inc., 308 Canal St.  
**NEWARK 8, N. J.**  
Electric Motors & Parts Corp., 392 Clinton St.  
**OKLAHOMA CITY 2, OKLAHOMA**  
John H. Cole Co., 323 N.W. 2nd St.  
**PHILADELPHIA 7, PA.**  
Electrical Maintenance Equipment Co.  
915-917 N. Broad St.  
**PITTSBURGH 21, PA.**  
Herbert J. Graham  
10 Roxbury Rd., Wilkensburg  
**SALT LAKE CITY 2, UTAH**  
J. R. Christiansen Agency, 247 East 5th South  
**SAN FRANCISCO 7, CAL.**  
Tri-State Supply Corp., 554 Bryant St.  
**SEATTLE 4, WASH.**  
Tri-State Supply Corp., 318 Occidental Ave.  
**ST. LOUIS, MO.**  
Data Painter, 3815 W. Pine Blvd.  
**STAMFORD, CONN.**  
J. A. Jones, 100 Boxwood Drive  
**TORONTO 14, ONTARIO**  
Electric Insulation & Fibre Co., Ltd.  
Mandata Rd., Etobicoke  
**WATERTOWN 72, MASS.**  
Insulating Fabricators of New England, Inc.  
69 Grove St.

## COTTRELL PAPER COMPANY, INC.

ROCK CITY FALLS, NEW YORK

Sales Office: Fall River, Massachusetts

*Fluorescent Lighting*

*Costs Less When You Use*

## FLEUR-O-LIER FIXTURES

You can buy fluorescent lighting 2 ways: 1. Initial Low Cost — or 2. Long-Term Economy.

Fixtures that carry the Fleur-O-Lier label usually aren't found in the Initial Low Cost group. But the quality built into every Fleur-O-Lier fixture assures you of maximum Long Term Economy.

You'll get better, more satisfactory, and more economical fluorescent lighting with Fleur-O-Lier luminaires because:

1. Mechanical and electrical construction meet rigid specifications.
2. Only Certified CBM Ballasts are used.
3. Only Certified Starters are used.
4. Complete photometric test data, including distribution curves and coefficients of utilization are provided to tell you *in advance* the lighting results you'll get.
5. Electrical Testing Laboratories, Inc., test, check and certify that fixtures conform to all the above before they can carry the Fleur-O-Lier label.

For assured fluorescent satisfaction and economy . . .

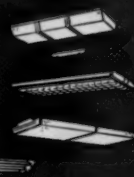
*Make Certain Your Fixtures are FLEUR-O-LIER*

## FLEUR-O-LIER

Manufacturers

2116 Kellin Bldg. • Cleveland 15, Ohio

Fleur-O-Lier is not the name of an individual manufacturer, but of a group of fixtures made by leading manufacturers. Participation in the Fleur-O-Lier program is open to any manufacturer who complies with Fleur-O-Lier requirements.





**troffers** with  
One piece Reflector Plate \* Wireway  
now makes recessed lighting...

# so simple to install!

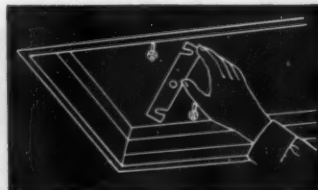


The one piece Reflector Plate-Wireway on which the electricians above are working contains all the electrical components of the "Magic Frame" Troffer. Entire troffer consists of just three parts: (a) Recessed chassis, (b) One piece Reflector Plate-Wireway, (c) Hinged door. No loose nuts or bolts, every movable part is captive or pre-positioned.

1. One man can install recessed chassis because weight of ballast is eliminated and patented "Speedy Latch" immediately holds chassis to ceiling.
2. Reflector Plate-Wireway suspended and securely attached to chassis by means of jack chain and "S" Hooks. With both hands free, splicing and pulling of wires is effortless.
3. Reflector Plate-Wireway can be entirely removed from chassis for easy electrical maintenance and repair.
4. "Magic Frame" Doors lock securely, open on two concealed hinges... may be removed by merely lifting and shifting. No tools required!
5. Actually a screwdriver is all you need to install "Magic Frame" lighting! No bolts, screws, hinges or light leaks to mar the clean, smooth ceiling line.
6. "Magic Frame" Troffers are available in all types of flat and curved glass, metal and plastic louvers—including ½" plastic cube. Doors are interchangeable.



**EXCLUSIVE "ADJUSTO-HANGERS"** eliminate need for precise positioning of troffer, insure perfect alignment, permit one man installation. Once installed, chassis need never be disturbed.



**PATENTED "SPEEDY LATCH"** eliminates loose screws and bolts, allows one man installation. Just a turn of the "Speedy Latch" locks chassis to the ceiling.



Write for complete Data and Specification Catalog today!

## Electro Silv-A-King Corporation

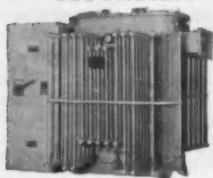
1535 S. PAULINA ST., CHICAGO 8, ILLINOIS • SPRUCE & WATER STS., READING, PENNSYLVANIA

DESIGNERS AND MANUFACTURERS OF THE FINEST IN LIGHTING

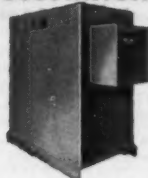


# SPECIFY MOLONEY DRY TYPE TRANSFORMERS

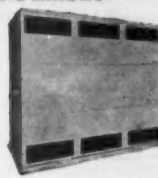
## SECONDARY UNIT SUBSTATION TRANSFORMERS



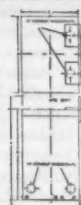
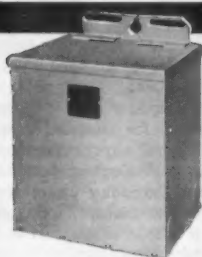
Askarel Load Center Transformers. Available in Kva and voltage ratings to meet your specifications. For installation indoors without expense of fireproof vaults.



Nitrogen Sealed Dry Type Load Center Transformers (Group 3 Insulation). Available in Kva and voltage ratings to meet specifications for indoor or outdoor installations.



Ventilated Dry Type Load Center Transformers (Group 2 Insulation). Available in Kva and voltage ratings to meet your specifications for indoor installation.



### TYPE DWH DRY-TYPE TRANSFORMERS

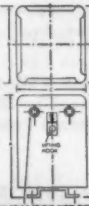
1½ through 15 Kva, 600 volts and below

KVA	ENCLOSURE	A	B	C	D	WT
1½	8½" x 11½" x 14"	17½	12	8½	14½	60 lbs.
3	8½" x 11½" x 14"	17½	12	8½	14½	80 lbs.
5	10½" x 13½" x 15½"	18½	14½	10½	15½	110 lbs.
7½	10½" x 13½" x 15½"	18½	14½	10½	15½	125 lbs.
10	12½" x 16½" x 18½"	22½	16½	14	18½	175 lbs.
15	13½" x 18½" x 18½"	22½	18½	14	18½	250 lbs.

### TYPE DWH DRY-TYPE TRANSFORMERS

25 through 50 Kva, 600 volts and below.

KVA	ENCLOSURE	A	B	C	WT
25	19½" x 20½" x 25"	29½	20½	19½	385 lbs.
37½	26" x 20½" x 30"	34½	20½	20½	485 lbs.
50	26" x 20½" x 30"	34½	20½	20½	605 lbs.



### TYPE DWS DRY-TYPE TRANSFORMERS

25 through 50 Kva, 600 volts and below.

KVA	ENCLOSURE	A	B	C	WT
25	17½" x 18½" x 26"	30½	20½	19½	385 lbs.
37½	19½" x 18½" x 26"	30½	20½	21½	470 lbs.
50	19½" x 18½" x 26"	30½	20½	21½	590 lbs.

Moloney single phase, Dry Type Transformers are contained in neat, attractively designed machinery gray enclosures which contribute to the overall appearance of any installation.

These transformers incorporate the wound Moloney HyperCore Cores resulting in a more compact, light weight unit.

Mounting arrangements have been designed to permit a flexibility of location with ease of installation.

Large terminal compartments, with knockouts, permit conduit connections from all directions. Accessible solderless connectors facilitate incoming wire connections.

High Voltage Volts	High Voltage Taps	Kva Ratings with a Low Voltage of 120-240 Volts	
		Type DWH	Type DWS
120 x 240	None	1½, 3, 5, 7½, 10, 15, 25, 37½, 50	25, 37½, 50
	None	1½, 3, 5, 7½, 10, 15, 25, 37½, 50	25, 37½, 50
240 x 480	1-10% BN x 2-5% BN	1½, 3, 5, 7½, 10, 15	—
	2-5% BN x 4-2½% BN	25, 37½, 50	25, 37½, 50
480	2-5% BN	1½, 3, 5, 7½, 10, 15, 25, 37½, 50	25, 37½, 50
	None	1½, 3, 5, 7½, 10, 15, 25, 37½, 50	25, 37½, 50
600	2-5%	1½, 3, 5, 7½, 10, 15, 25, 37½, 50	25, 37½, 50
	4-2½%	25, 37½, 50	25, 37½, 50

## HOW TO SPECIFY MOLONEY TRANSFORMERS

When specifying or ordering—

- POWER TRANSFORMERS
- DISTRIBUTION TRANSFORMERS
- LOAD TAP CHANGING TRANSFORMERS
- NETWORK TRANSFORMERS
- REGULATING TRANSFORMERS
- FEEDER VOLTAGE REGULATORS
- UNIT SUBSTATIONS
- LOAD CENTER TRANSFORMERS
- CONSTANT CURRENT TRANSFORMERS
- SUBWAY TRANSFORMERS
- DRY TYPE TRANSFORMERS

The following information should be given, in order

1. Number of units
2. Kva rating of units
3. Type of Cooling
4. Maximum Permissible Temperature Rise °C
5. Phase (Single or Three)
6. Frequency in cycles per second
7. High Voltage rating (primary windings and taps) and insulation level
8. Low Voltage rating (secondary winding and taps) and insulation level
9. Voltage of other windings and taps and insulation level if required
10. Impedance requirements if any
11. Optional features as required
12. Service conditions

## MOLONEY ELECTRIC COMPANY

Power Transformers • Distribution Transformers • Step Voltage Regulators • Regulating Transformers • Load Tap Changing Transformers • Load Center Transformers • Unit Substations • Network Transformers • Constant Current Transformers • Capacitors • Transformers For Electronics

SALES OFFICES IN ALL PRINCIPAL CITIES • FACTORIES AT ST. LOUIS 20, MO. AND TORONTO, ONT., CANADA

ELECTRICAL CONSTRUCTION AND MAINTENANCE . . . MID-SEPTEMBER, 1955

121



# ROME CABLE CORPORATION

500 RIDGE STREET, ROME, NEW YORK

*Plants at Rome, New York and Torrance, California (Steel Conduit)*

## SALES OFFICES

\*Atlanta, Ga.  
156 Simpson, N. W.

Boston 10, Mass.  
80 Federal St.

\*Chicago 39, Ill.  
4505 W. Grand Ave.

\*Indictee Warehouse Location

\*Dallas 26, Texas  
Peabody Bros.  
3015 Taylor St.

Houston 2, Texas  
Peabody Bros.  
240 Shea Place

Cleveland 14, Ohio  
818 Society for  
Savings Bldg.

\*Denver 4, Colo.  
1160 Elati St.

Detroit 2, Mich.  
New Center Bldg.

Kansas City 11, Mo.  
406 West 34th St.

\*Los Angeles 22, Cal.  
2510 South Malt Ave.

New York 17, N. Y.  
60 East 42nd Street

Philadelphia 7, Pa.  
12 South Twelfth St.

Pittsburgh 22, Pa.  
1901 Oliver Bldg.

Portland 5, Oregon  
1020 S. W. Taylor St.

Tulsa 14, Okla.  
Peabody Bros.  
2438 East 21st

St. Louis 17, Mo.  
6617 Clayton Rd.

\*St. Paul 4, Minn.  
345 N. Wheeler Ave.

\*Salt Lake City 1, Utah  
230 South 4th, West.

\*San Francisco 24, Cal.  
1100 Salby Street

\*Seattle 4, Wash.  
3430 Fourth Ave., S.

## ELECTRICAL WIRES AND CABLES

Rome Cable offers to the purchaser of wires and cables a line of bare and insulated conductors of sufficient variety to adequately service practically any electrical installation, both low and high voltage.

Uniformly high quality of product is maintained through utilization of manufacturing equipment of latest design, progressive laboratory research and product engineering, rigid inspection procedure, as well as a high regard for customer satisfaction.

## INSULATIONS AND SHEATHS

Rome Cable research, engineering and production have developed rubber and

thermoplastic insulations and sheaths representing the ultimate in quality and performance.

Outstanding among rubber insulating compounds is RoZone . . . a premium quality insulation of the oil-base type having high dielectric and impulse strength, excellent resistance to corona and ozone cutting, remarkable electrical stability in water, as well as inherent resistance to heat, aging and sunlight.

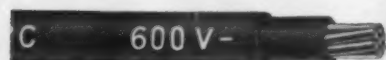
RoMarine . . . a moderately low-cost, general purpose rubber insulation has compiled an enviable service record for high immunity to the effects of heat and moisture.

Rome Synthinel (polyvinyl chloride) and

RoLene (polyethylene) enjoy wide acceptance as excellent thermoplastic insulating and sheath compounds.

RoPrene (Neoprene) is a very popular nonmetallic cable sheath. Resistant to acids, alkalis, oils, sunlight, abrasion and flame.

Rome Cable's new special thermoplastic sheath, RoSeal, for shielded power cable up to 15 KV has superior moisture resistance, low coefficient of friction, easier bending and handling characteristics at sub-zero temperatures, flame resistance, desirable mechanical properties for long service, and is suitable for both underground and overhead use.



**Rubber and Braided Building Wire—Type R and Type RW-RH, 600 Volts.** Code Grade, Type R (60° C.), and "Dual Purpose" Moisture and Heat Resistant Grade, Type RW (60° C.)—Type RH (75° C.), rubber insulated and braided building wires carry full approval of Underwriters' Laboratories, Inc. Available as solid or stranded in standard range of sizes and colors.



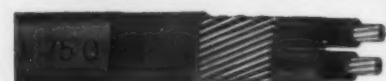
**Rome Synthinel® Building Wire—Type TW, 600 Volts.** A polyvinyl chloride thermoplastic insulated building wire, approved by Underwriters' Laboratories, Inc. for use in dry or wet locations. It is highly resistant to heat, sunlight, oils, acids, alkalis, moisture and flame.



**RoFlex Nonmetallic Sheathed Cable—Type NM, 600 Volts.** Conductors are insulated with high quality thermoplastic compound and outer braid is of glass over which is an improved gray finish which is nonflaking. Available in sizes 14 AWG to 4 AWG, 2 and 3 conductor. Approved by Underwriters' Laboratories, Inc.



**Rome FlexAll Thermoplastic Nonmetallic Sheathed Cable, 600 Volts.** Approved by Underwriters' Laboratories, Inc. as Type UF (underground feeder) and Type NMC (Nonmetallic Sheathed Cable—corrosive resistant). Particularly recommended for between-building wiring; farm, industrial and residential yard lighting; interior wiring of livestock buildings, dairies, breweries, packing houses, cold storage and ice plants.



**Service Entrance Cable—Type SE.** Offers the advantages of heat resistant rubber insulation, plus long-lived protective braid of combined glass and presaturated yarns with improved gray finish which is nonflaking. U/L approved.



**Portable Cords and Cables.** Available as Rome 50 Type SO-600 volts and Type SJO-300 volts, and Rome 60 Type SO, all U/L approved. Also, Type W and Type G-600 volts.



**Rome 60 Mining Cable.** A tough Neoprene jacketed cable with conductors interlocked to sheath, and grounding conductor embedded in a Neoprene web—designed for long rugged service under the most severe mining conditions.



**Rome Synthinel Machine Tool and Control Wire, 600 Volts.** Designed for the wiring of automatic machine tools and control circuits, this product has superior characteristics of long life, high resistance to heat, oils, chemicals and solvents and uniformly small diameters for more room in tight places. Available in sizes 18 AWG through 4/0 AWG with thermoplastic insulation of clear permanent colors. Conforms to National Machine Tool Builders Association Standards.

**Weatherproof Wire—Types URC, RoPrene and RoLene.** Conductors can be furnished in copper, aluminum and ACSR. URC and RoPrene available with soft copper sizes 14 through 6 AWG in handy 500 ft. coil packed in individual carton. Other special types designed for tree conditions are available.

**Self-supporting Secondary and Service Cable.** A new development embodying the time-proven construction of insulated power conductors spiraled around a bare neutral for mechanical support. Power conductors are insulated with RoPrene (Neoprene), RoLene (polyethylene) or RoMarine-RoPrene. A TreePlex type is designed for tree conditions.

**Diesel Electric Locomotive Cable.** For distinct installation, operating and long-service advantages for control circuits, lighting, power, cab signal, and motor or generator leads. 750 volts with a maximum copper temperature of 75° C.

**RoMarine-RoPrene®, Type USE—Style RR, 600 Volts.** May be installed directly in earth, in conduit and aerially, or in runs combining all three. Combines RoMarine, a high moisture resistant insulation with all resistant RoPrene (Neoprene) sheath. Easy to splice and terminate. Easier to handle and less costly than lead sheath. Approved by Underwriters as Type USE.

**RoZone®-RoPrene Power Cable—for Voltages up to 15000 Volts.** A premium construction recommended for low- or high-voltage service where dependability and high quality are paramount. Combines RoZone, a premium oil-base insulation, with RoPrene (Neoprene) sheath. Possesses high dielectric and impulse strength as well as excellent resistance to ozone cutting and remarkable electrical stability in water. Easy to splice and terminate. May be installed direct in earth, in conduit and aerially, or in circuits combining all three, shielded or unshielded. Also supplied with shield and thermoplastic sheath as RoZone-RoSeal.

**Airport Lighting Cables.** Rome airport lighting cables were first to obtain approval of CAA under requirements of Specification L-824. This and many other types are supplied in single and multi-conductor constructions. RoMarine (Type RR) or RoZone (Type ROR) are the more popular insulations, under a RoPrene (Neoprene) sheath. Voltages range from 600 through 5000 volts.

**Street Lighting Cables—2000 to 8000 Volts, Open Circuit.** Rome Cable offers a variety of street lighting cables for underground or overhead wiring of series and multiple lighting systems. Insulations may be of rubber or thermoplastic compounds protected with economical, nonmetallic sheaths.

**Station Control Cables, 600 Volts.** Rome Cable leads in the manufacture of station and supervisory control cables. Sound engineering, experience and modern manufacturing facilities provide a variety of constructions. Three typical constructions utilize (1) RoZone insulation with RoPrene (Neoprene) sheath (Type CRO-1), (2) RoMarine insulation with RoPrene (Neoprene) sheath (Type CRM-1) and, (3) all thermoplastic construction (Type CT-2).

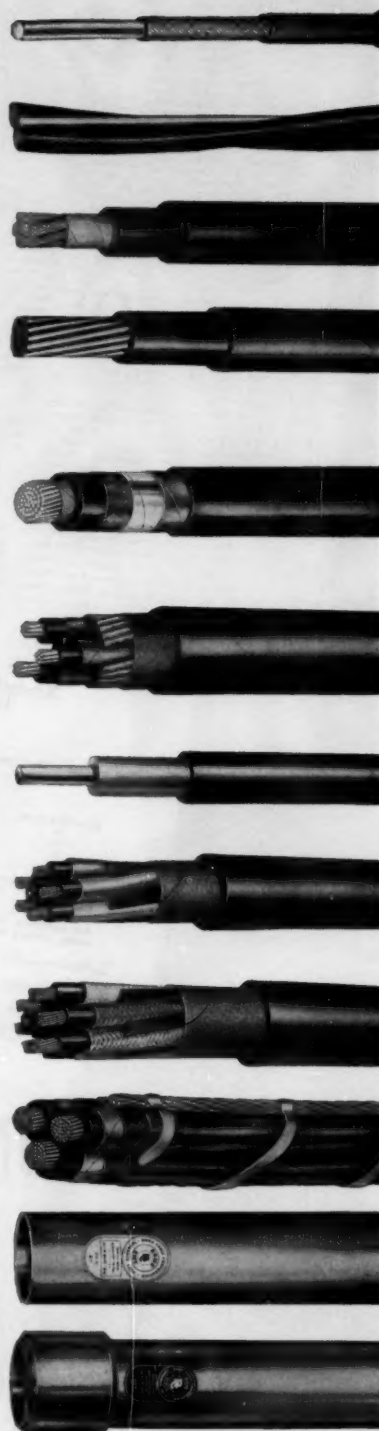
**Signal Cables—IMSA Types, 600 Volts.** Rome Cable regularly supplies cables in conformance with IMSA Specifications Nos. 1, 3, 4, 5, 19 and 20. Popular Type FR, Specification No. 5, embodies moisture resistant insulation (RoMarine) and a nonmetallic sheath (RoPrene).

**Preamsembled Power and Control Cables.** Where aerial installation is involved, multiple conductor cables may be factory preassembled with supporting messenger of bare copper or copperweld.

**Rome • EMT Electrical Metallic Tubing.** A superior thinwall steel conduit. Solid electrogalvanized zinc exterior finish resists corrosion and abrasion. Mirror-smooth interior makes fishing and pulling easy. Underwriters' approved.

**Rome • RIGID Heavy-Duty Steel Conduit.** A superior heavy wall conduit. Cold formed from shot blasted carbon steel and electrically welded for extra strength. Hot-dip galvanized by exclusive Sendzimir process for exceptional corrosion and abrasion resistance. Smooth, burr-free interior.

Rome • EMT and Rome • RIGID are available in straight lengths and 90° elbows. EMT from ½" to 2". RIGID from ½" to 6".



*It Costs Less to Buy the Best*



**ROME CABLE**

*Corporation*

ROME • NEW YORK

and  
TORRANCE • CALIFORNIA



## DON'T BE MISLED

20 conductors be installed in single raceway compartment. Metal framing would be specified as follows:

The use of a steel channel, all-bolted framing member as a combination rigid electrical fixture support and lighting branch circuit conductor support has been approved by the Underwriters Laboratories. Such approval is contingent upon the continuous channel opening between fixture connections being equipped with a wire strip.

File E21928.

December 6, 1954

Guide No. 360 A19.

Kindorf Co., The,  
4060 Harlan St., Emeryville 8, Calif.

Surface Raceways.

For not more than the number of wires of sizes and types indicated in the following table:

Wire Size AWG	Raceway Cal. No. B-966	Types T, TW, AVS, RH, RU, R, or RW Maximum Number of Wires Raceway Cal. No. B-966	Raceway Cal. No. G-975
14	6	6	6
12	5	5	5
10	4	4	4
8	3	3	3

Note: Also may be installed to support and supply electric discharge type lighting fixtures when raceway wiring is suitable for at least 75 C, except wire suitable for 60 C may be used when clearance between fixtures and raceway is at least 1-in. When so used, raceway shall be supported at intervals not exceeding 10-ft for raceways B-966 and G-975, and not exceeding 8-ft for raceway B-966. In all cases, closure strip G-969 is required to complete raceway enclosure.

Listed—Label Service.

See description of Label Service on guide card.

This card is issued by Underwriters' Laboratories, Inc.

## Check your specifications issue of ELECTRICAL CONSTRUCTION AND MAINTENANCE

... pages 94 and 95, paragraph 6.49 (B) covering Surface raceways." Then look up Underwriters' Guide No. 360 A 19. It's the *only* way to be sure that any system of channel and fittings is approved as a *combination surface metal raceway and fluorescent fixture support*. You'll find Kindorf so approved—a copy of the Underwriters' card is reproduced above.

Specify . . . Use

## KINDORF fluorescent lighting supports



write for our  
product bulletin g-1  
"Fluorescent lighting  
supports by Kindorf"

A PRODUCT OF STEEL CITY ELECTRIC COMPANY  
PITTSBURGH 33, PA.

# new...

the most advanced  
achievement in  
fifty-seven years  
of lighting research...

the incomparable

## PARADOME\*

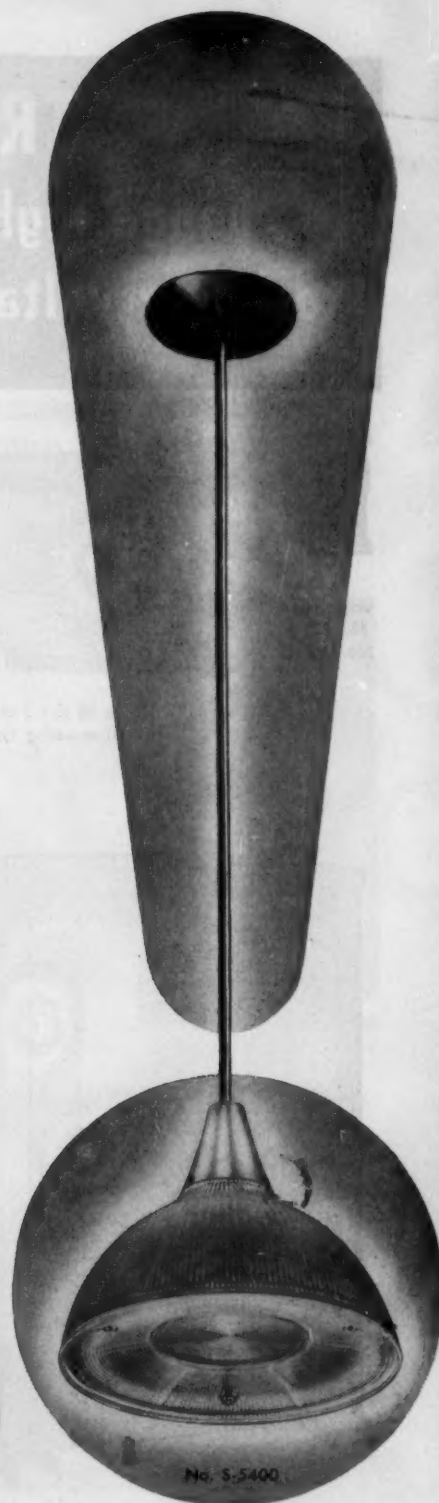
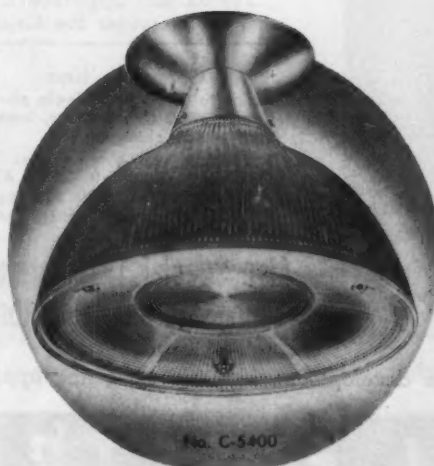
The finest semi-direct lighting unit ever  
engineered for balanced-illumination in  
**CLASSROOMS, MODERN OFFICES,  
SHOPPING CENTERS, PUBLIC  
INSTITUTIONS...**

Through an altogether new idea, using  
a concave circular **CONTROLENS\***  
and a new Prismatic Reflector enclosed  
in a special fiber-glass (**FIBERGLO\***)  
cover, an extraordinary control of  
light is achieved. Maximum illumina-  
tion is directed to vital areas with the  
best visual comfort and lowest bright-  
ness. Paradome's graceful design  
conforms with all modern interiors—  
particularly today's classrooms.

Write for complete engineering data  
on Paradome. No obligation.

**HOLOPHANE COMPANY, Inc.** • 342 Madison Avenue, New York 17, N. Y.  
The Holophane Co., Ltd., The Queensway, Toronto, Ont.

\*Trademark



Lighting Authorities Since 1898



For Better Lighting . . . Be Specific . . .

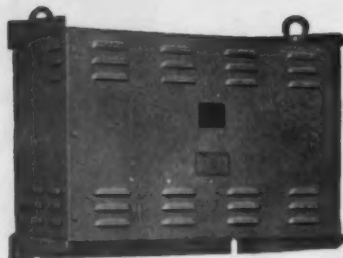
# HOLOPHANE

# TRANSFORMERS

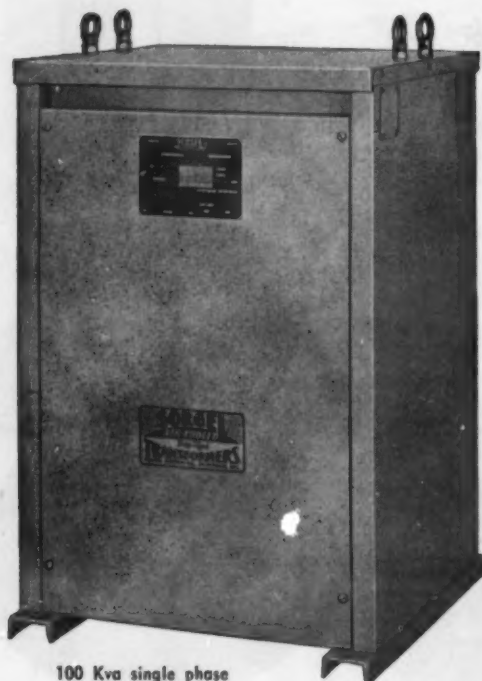
To change higher voltage distribution service to lower voltage lighting and power circuits



1/4 Kva  
single phase  
480/240 to  
240/120 volt



15 to 50 Kva 3-phase  
wall mounting type



100 Kva single phase

## SORGEL AIR-COOLED DRY-TYPE TRANSFORMERS

are the most practical type for indoor installations

Requiring no oil or liquid, they can be installed in almost any convenient place inside of buildings, without fire-proof vaults or other enclosures, and meet the requirements of the National Electrical Code. This eliminates the necessity of long runs of secondary feeders and reduces installation and wiring costs.

The transformers can be installed at load centers, using higher voltage feeders, requiring smaller copper, increasing efficiency, improving voltage regulation and reducing losses. They require no maintenance or further attention after installation.

Easy installation, easy connecting, rugged construction, low noise level.

### TYPICAL APPLICATIONS

Sorgel Air-Cooled Dry-Type Transformers are used to:

- Operate 120 volt lighting and portable equipment from 240, 480 or 600 volt power circuits.
- Supply more than one voltage from a single voltage system.
- Change odd voltages to standard voltage.
- Phase changing.
- For high voltage interior distribution systems of 2400, 4160, 4800, 7200, 13,200 and up to 15,000 volts.
- For substations and load centers.

*Tested and approved by Underwriters' Laboratories  
under the Re-examination Service*

### Complete line

1/4 Kva to 2500 Kva single phase.  
1 Kva to 3000 Kva 3-phase, 2-phase,  
and phase changing.

All standard voltages, such as 120,  
208, 240, 480, 600, 2400, 4160,  
4800, 7200, 13,200 and up to  
15,000 volts, and any intermediate  
or special lower voltage.

**Also Special Transformers  
and Saturable Reactors**

### Stock carried by jobbers in the following cities:

New York, N. Y.	Rockford, Ill.
Buffalo, N. Y.	Rock Island, Ill.
Roxbury, Mass.	Louisville, Ky.
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Cincinnati, Ohio	Davenport, Iowa
Cleveland, Ohio	Cedar Rapids, Iowa
Richmond, Ind.	Beaumont, Tex.
Milwaukee, Wis.	Los Angeles, Calif.
Chicago, Ill.	

*Consult the classified section  
of your phone directory, or  
write to the factory*

40 years' experience in the development, manufacturing and application of transformers

# SORGEL ELECTRIC CO.

838b W. NATIONAL AVE. • MILWAUKEE 4, WIS.



# Solve Distribution Problems with SORGEL Substations

**"Packaged" Units for Indoor Installations**

**Speeds Expansion and Earlier Production.** The Substation is shipped complete in one or more factory-assembled units, on a substantial steel base, completely wired and tested, ready for installation and final connection. This saves the extra expense of buying separately the transformers, switches, fuses, insulators, circuit breakers, and other accessories; thereby also saving the extra labor cost and trouble when assembling and connecting on the job.

**Flexibility for Future Conditions.** Being all self-contained in a single unit, the Substation can be readily moved from one location to another.

**Saves Copper.** The Substation can be placed near the load center, so that shorter secondary cables and smaller primary lines can be used. Improved voltage regulation and reduced line drop.

**Reduces Costly Power Interruption.** By locating the Substation at or near the load center, it restricts the power interruption to that area. Other areas, not affected, can continue operation.

**Years of Continuous Hard Service.** The rugged construction, liberal design, expert craftsmanship, sound engineering, all embodied in SORGEL transformers, have given years of continuous severe service.

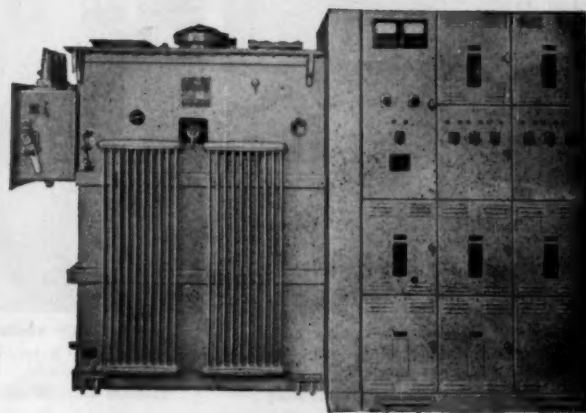
**Types.** Either dry-type or Askarel-cooled transformers are available with any type or make of switchgear, or from any substation manufacturer.

## Engineered to meet your exact requirements

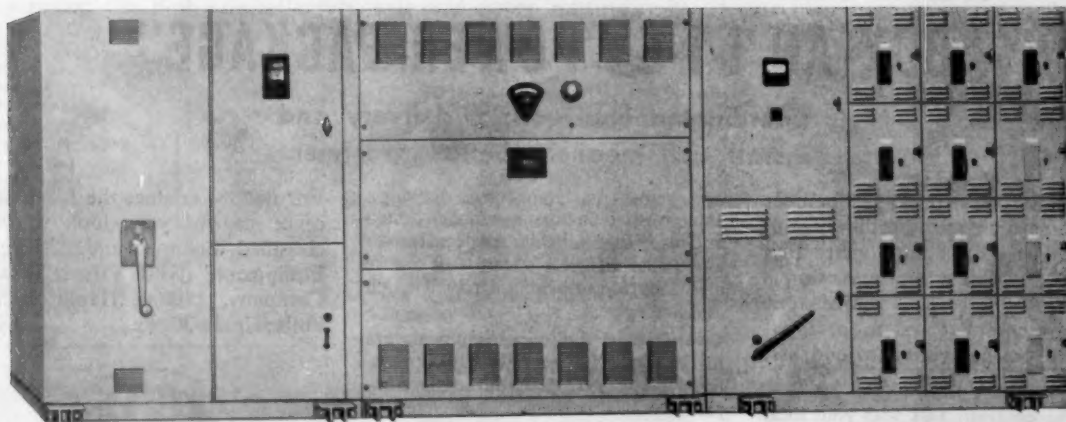
Not necessary to design or change  
your installation to fit a "standard"

**Sizes up to 3000 Kva.  
All voltages up to 15 KV.**

SORGEL transformers are particularly adaptable for indoor installations; in hospitals, libraries, schools, institutions, office buildings, stores, and other structures where low noise levels are an important factor.



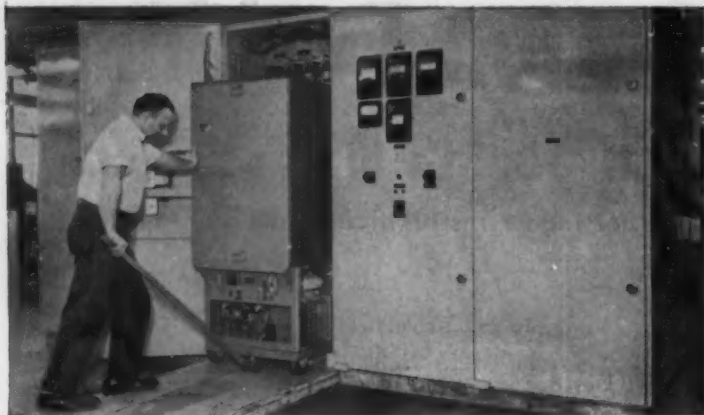
500 Kva, 13,800 volt Askarel-cooled SORGEL transformer, with primary liquid filled switch, secondary meters, and circuit breakers.



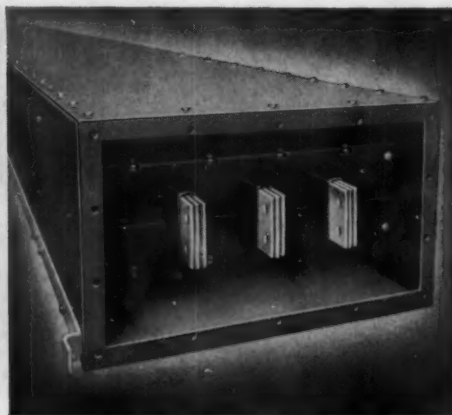
2000 Kva 3-phase, 13,200 volts air cooled dry-type transformer, with primary switchgear, metering, and secondary breakers.

# SORGEL ELECTRIC CO.

838b W. NATIONAL AVE. • MILWAUKEE 4, WIS.



**Metal-clad switchgear.** Horizontal drawout air circuit breakers in rigid, all-welded enclosures. Available in ratings from 2400 v through 15 kv—50 through 500 mva interrupting and 2000 amp continuous.



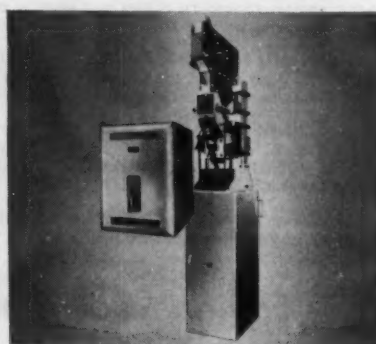
**Nonsegregated phase, metal-enclosed bus.** For switchgear connections. In ratings 600 v through 6000 amp; 5, 7.5 or 15 kv through 5000 amp.



**Unit substations.** I-T-E primary and secondary unit substations can be supplied for any application—indoor and outdoor—and in any standard rating.



**Low voltage switchgear.** Ratings through 600 v a-c, 250 v d-c, 6000 amp continuous, 15,000 through 150,000 amp interrupting.



**Individual breakers.** I-T-E large air circuit breakers are available in a wide range of types and ratings, 600 v a-c, 250 v d-c, 750 v d-c.

## NEW CONSTRUCTION ECONOMY TIP: BUY AN I-T-E "POWER PACKAGE"

**Coordinated engineering, delivery and installation means a better investment**

An I-T-E "power package" includes the complete power handling facilities you need for a new construction project, building addition, or simple expansion of electrical service—one unit or a complete system for application from generation to end use. You save many ways:

**Sound planning.** Talk with your local I-T-E application engineer about your general power requirements before you build. He'll work with you to determine the equipment needed to assure complete protection with greatest economy in total investment, operating costs, and construction time.

**Easier installation.** Before you begin construction, I-T-E will supply you with

arrangement and channel base drawings. Equipment is factory assembled, tested and ready to install. Standardized frames and panel elements assure that future additions to your switchboard will match and line up.

**Coordinated delivery.** Shipments are made from I-T-E according to a predetermined schedule. Each part of the complete "power package" is delivered to the job when needed. This saves delays and eliminates inconveniences.

**Assured performance.** Since I-T-E will supply all equipment—pre-engineered—you are saved the work of coordinating equipment of different manufacture. You can be sure that the separate parts of an I-T-E "power package" will fit and function together.

For details, contact the I-T-E sales office nearest you—look in your classified directory under "Electric Equipment." I-T-E Circuit Breaker Company, 19th & Hamilton Sts., Philadelphia 30, Pa.



**I-T-E CIRCUIT BREAKER COMPANY**  
Switchgear Division

# THE EDWIN F. GUTH COMPANY

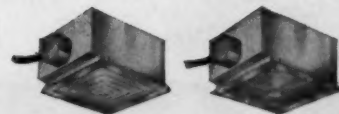
2615 Washington Ave., St. Louis, Mo.



## THE REALLY COMPLETE LINE OF BOTH FLUORESCENTS AND INCANDESCENTS!

—featuring the newest advancements in lighting:

- **GRATELITE®**—exclusive  $\frac{3}{8}$ " cubes provide 45° x 45° shielding for sight-saving diffusion
- **Telescopic Channel**—5-ft. package to accommodate 8-ft. units
- **Rolled Channels**—for rigidity and precision
- **Completely Assembled Fixtures**—factory tested



**"ALL-SQUARE"**—for recessing. One-piece die-cast frame. Light-leakproof. Widespread or concentrating lens—sizes 6½" sq., 8" sq. & 12" sq. PRE-WIRED. Removable top and drop hinge bottom for servicing from above or below. Catalog 49-V.



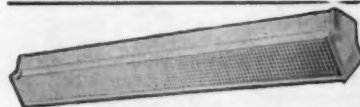
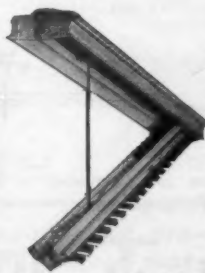
**SEELUX®**—totally indirect open bottom Luminaire for Silver Bowl Lamps, with modern ALZAK concentric louvers; for stem suspension or close mounting. Bulletin 864-V.

When you specify GUTH Luminaires you get the benefit of more than a half-century's experience in pioneering better lighting. We make good specialized equipment for every lighting need—all precision-planned for economical installation and maintenance:

**FLUORESCENT:** Commercial and Industrial; Glass diffused, Eggcrate shielded, totally indirect, luminous indirect, recessed troffers and exposed lamp types.

**INCANDESCENT:** Commercial and Industrial; Indirect, direct and semi-indirect types; also high bay reflectors, exit and utility lighting units.

**GUTHLITE®** — the revolutionary "Jackknife" Hinge Luminaire that swings down for easy relamping or cleaning right from the floor! For 2 40- or 2 85-watt or 2 4-ft. SLIMLINE lamps; ceiling or suspension, unit or continuous mounting. Simplest fixture to install. Bulletin 845-V.



**"V" CORRIDOR UNIT**—with GrateLite® Louver-Diffuser. Fills wide hallways and corridors with practical, wall-to-wall light. Lamps shielded by easily maintained GrateLite. Models: 4' & 8' for 1 or 2 lamps. Bulletin 906-V.

\*U.S. & Can. Pats. Pend. TM Reg.

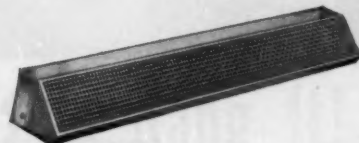
\*\*TM Pats. Pend.



**WYTE-LINER**—white inside and outside, 7% Uplite Component (takes gloom off ceiling). AIRFLOW channel for longer ballast life. Reflectors 300° Permalux or Porcelain Enamel. Made in 2 and 3 40-watt, 2 85-watt, and 4- and 8-ft. SLIMLINE lamps. Easy to install and clean. Catalog 48-V.



**"LITE-BLOX" RECESSED TROFFERS**—for 1, 2, 3 or 4 lamps: 20-, 40-, 85-watt, or 4-ft., 6-ft., or 8-ft. SLIMLINE. Exclusive end KO's provide exact 48.0"; modular design for unlimited patterns. Wide variety of shielding and diffusing glass panels available; also ALZAK Paraflector Louver. Catalog 50-V.



**LUMINOUS COVE**—the 2-in-1 bracket\*\*, beams 80% of light directly upward and outward, 20% downward to side walls. Mounted "upside-down" it solves dozens of tricky lighting problems. Perfect shielding in 45° x 90° zones by GrateLite®. Write for Bulletin 929-V.



**PEERLITE (TM)**—the new, ultra-modern fixture offering great flexibility. Forms any pattern—T, H, □, +, 1, 20% upright. Top plates available for 100% downlight. For 2, 3 or 4 lamps—4' or 8' long. Supplied with any type of louver or glass diffuser you wish. (Shown with new GrateLite® Louver-Diffuser.) Bulletin 911-V.

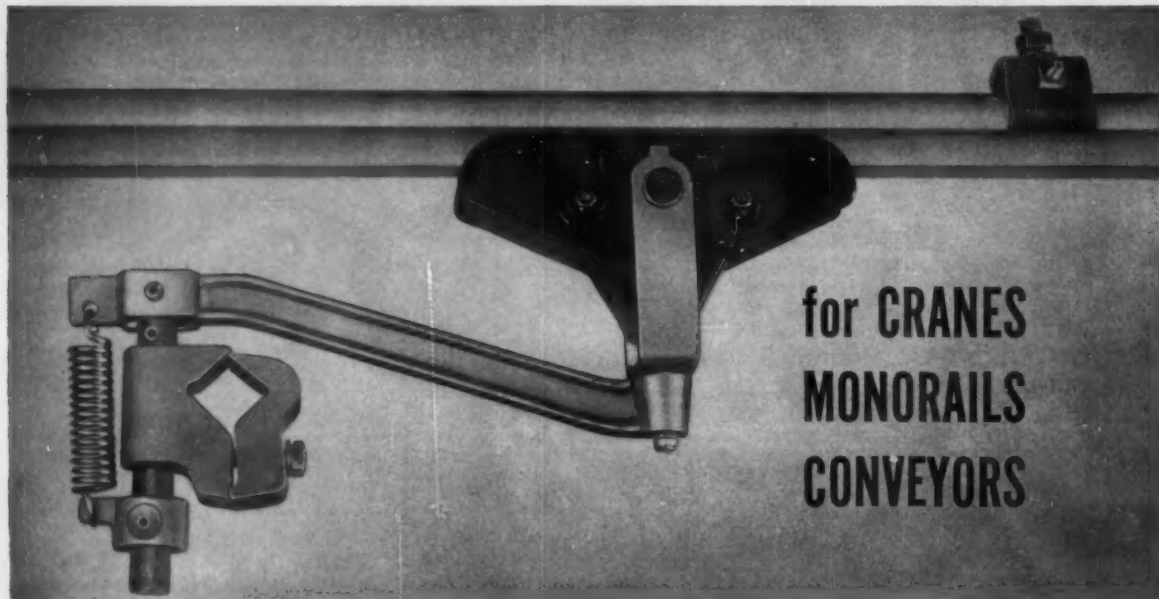


**TRUCOLITE®**—versatile, highly efficient, semi-direct type; can be used open, with Eggcrate louvers. For 2, 3 and 4 40-watt lamps—also 2 and 4 4-ft. or 8-ft. SLIMLINE lamps. Ceiling or suspension, unit or continuous mounting. Bulletin 814-V.



# Save with INSUL-8-BAR

## ENCLOSED CONDUCTOR SYSTEMS



**Low cost safety systems, for all moving electric powered machines, can be engineered on the job**

### ECONOMICAL

Simplicity of design and rugged construction reduce initial and maintenance costs to the minimum. The basic components are:



#### CONDUCTORS—

figure 8 bar with insulating cover. Capacities 100 to 500 amps. Track is supported by hanger clamps.

**COLLECTORS**—sliding shoe type. Capacities 50 to 150 amps. Available in eight different mountings.



### FLEXIBLE

The standard Insul-8-Bar system meets all requirements of mobile electrification. Neither special parts nor special engineering are ever required.

**STANDARD PARTS**—readily adaptable in the field. No costly factory-fabricated curves are required.



**COMPACT**—conductors can be placed as close as 1¼" centers, in any desired arrangement.



Insul-8-Bar eliminates all major electrification hazards. Gives greater versatility to moving machines. Costs less initially, less to maintain. Write for catalog and technical data.

**INSUL-8-CORP.**



1285 ROLLINS ROAD, BURLINGAME, CALIF.

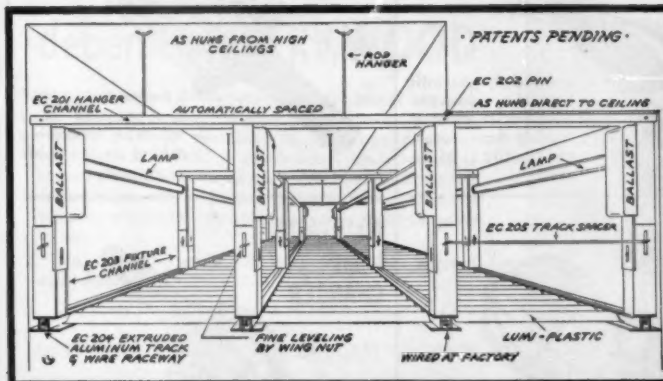
**INSUL-8-BAR SYSTEMS**

• **BARE BAR SYSTEMS**

• **SIDE CONTACT SYSTEMS**



## Only Electrical Contractors Can Hang It!



**\* A pre-planned, pre-wired, electrical profit package that provides for Lighting, Sound Control and Air Flow!**

Double your dollar volume. Protect Your Profit! The Electra-Luminous Ceiling is patented to insure design, quotation and sale only to the Electrical Contracting Trade . . . There is nothing else like it on the market. This dramatic ceiling of glareless, shadowless, all-over light also provides sound control and a ceiling-wide space for air conditioning and heating. Electra-Luminous Ceilings are easily installed because the individual units are self-aligning and self-spacing . . . the suspension system is a pre-wired, light source raceway.

Electra-Luminous Ceilings install with one third fewer component parts. The Plastic Diffusing Panels are of unbreakable, corrugated Lumi-Plastic . . . the entire installation is UL labelled for use beneath sprinklers. Simplified, profitable yearly maintenance eliminates costly emergency calls. The price is low . . . less than the cost of conventional illumination and sound control alone.

**don't split your PROFITS...**  
**DO THE ENTIRE JOB YOURSELF**  
 No jurisdictional conflicts possible with the

## Electra-Luminous Ceiling! \*

Show the functional beauty of an Electra-Luminous Ceiling to your clients. Send for free illustrated booklet and the location of an installation near you.

### LUMINOUS CEILINGS, INC.

Dept. 11 2500 W. North Ave., Chicago 47, Ill.

Please send me your free illustrated booklet and tell me where I can see an ELECTRA-LUMINOUS CEILING installation!

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CITY AND STATE \_\_\_\_\_

McGILL<sup>®</sup> ELECTRICAL SPECIALTIES

# The McGILL NAME IS YOUR GUARANTY OF QUALITY

For over 50 years, McGill products have given outstanding service in machinery, in control of power units and lighting, in protection of lighting equipment. There are no finer electrical specialties made.

ONLY McGILL MAKES *Levolier*<sup>®</sup> SWITCHES

## No. 71 SWITCH

15/32" thick; 6 amp. "T" 125 volt, 3 amp., 250 volt; 6" wire leads permanently fastened to terminals.



## No. 41 SWITCH

5/8" thick; lever operated for positive control from any angle; adaptable to lighting, FHP motor control.



## No. 25 SWITCH

single pole, double break mechanism; 1/2" thick, 1/2" wide, 1" long; standard with 6" wire lead.



## No. 400 SWITCH

single pole, 3-speed, 4 amp. Levolier switch; dependable long service on ventilating fans and FHP motors.



## No. 4100 INDUSTRIAL LAMP HOLDERS

single-circuit, brass, universal lever control; heavy screw shell; double-wall-ened cap and casing.



## No. 4300-PB LAMP HOLDER

double-thick impact-resistant molded phenolic shell; cap and casing screw together for easy wiring.



## No. 7000-SR LAMP GUARD



rubber handle, Levolier switch, reflector; extra-heavy steel wire cages have No-Rol feature.

## No. 5025-SLRG SERVICE LIGHT



grounded, phenolic handle, convenience outlet, concentrating lens rotary reflector; 25 ft. cord.

## No. 3005 VAPORPROOF GUARD



globe of 3/16" heat-resisting glass; shoulder on pliable rubber gasket holds globe rigid.

## No. 7000-SR38 LAMP GUARD



gives light with flood and spot characteristics; takes PAR-38 lamp; 7000-30 guard takes R-30-75 lamp.

## No. 7100-SR LAMP GUARD



clamp arrangement instead of screw allows quick lamp changing without tools; rubber handle, reflector.

## ADAPTABLE LAMP CHANGER



rubber-covered spring steel fingers held by coil spring; available for all types of lamps.

McGILL PRODUCTS ARE ALL WAYS BETTER



For more complete information on McGill switches, lamp guards, lamp holders and other electrical specialties, send today for Catalog 49-A. You will find McGill products at leading electrical wholesalers.

McGILL<sup>®</sup> ELECTRICAL SPECIALTIES

McGILL MANUFACTURING COMPANY, INC.  
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# For all your CARBON BRUSH requirements . . . depend on KIRKWOOD

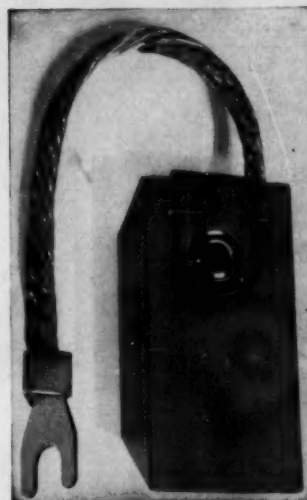
You'll find Kirkwood Carbon brushes are priced right, last longer, cause a minimum of commutator wear and therefore reduce maintenance costs.

Physical properties are controlled and all styles and grades are produced under rigid specifications.

Kirkwood carbon brushes are "application engineered" for best performance.

OVER 750 SIZES IN STOCK FROM COAST TO COAST

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## KIRKWOOD CARBON CORPORATION

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4832 RIDGE ROAD

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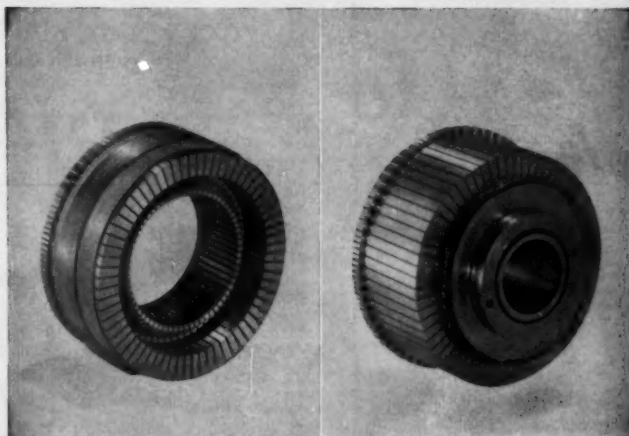
# For all your COMMUTATOR requirements . . . depend on KIRKWOOD

Kirkwood dependable commutators insure against service failures because they are engineered for accuracy, precision machined to bore and diameter, bars won't throw, high grade mica, heat treated to reduce expansion and excess mica binder. Kirkwood commutators will withstand the most severe changes of heat, speed and vibration . . . over 10,000,000 new in use.

We can refill your old cores or supply banded assemblies.

Complete range from  $\frac{3}{8}$ " to 50" diameter.

OVER 1000 SIZES IN STOCK FROM COAST TO COAST



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## KIRKWOOD COMMUTATORS

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# MULTI

## FOR SCHOOLS



**Cat. No. 3088 with Hinged Wire Guard**

Gymnasium fixture for flush mounting in suspended ceiling. Serviceable from above or below. Reflector is lifetime porcelain enamel on steel.

Lamp size 300-500 Watts



**Cat. No. 4090**

High bay RLM reflector for open ceiling gym. Made in alzak finish aluminum or porcelain enameled steel.

Lamp sizes 300-500 Watts  
750-1500 Watts



**Cat. No. 3276**

Swimming pool fixture lifetime porcelain enameled reflector. Cast aluminum pendant filter. Globe can be clear, opal or heat resisting.

Lamp size 300-500 Watts



**Cat. No. 3071**

Shower room fixture. Porcelain enameled canopy. Aluminum guard.

Lamp size 150 Watts

# LIGHTING EQUIPMENT DESIGNED FOR LASTING SATISFACTION

## FOR INDUSTRY

THE NAME KNOWN FOR QUALITY



BACKED BY OVER 35 YEARS EXPERIENCE



### New RLM Specification FLUORESCENT FIXTURE

Basic 2 lite 40 Watt with upward light component. ETL turret sockets, ballast & accessories. Also available for 3-40 Watt lamps; continuous tandem installation or with 4' and 8' blank channel. Also available with rapid start ballasts.



**RLM DOME With Multi Thredlok Socket**

Lifetime porcelain enameled steel reflector. Made Dome, shallow bowl, flat cone, deep bowl & angle. Thredlok socket allows for fast, labor saving maintenance. Reflector, lamp & socket removable as a unit means less out of service delays.

Lamp sizes range from 100 Watts to 1500 Watts



Ceiling fixture for general lighting of uniform distribution without glare. Pan is 18 GA. Aluminum anodized etched finish. Opal globe is 8, 10, 12, 14, 16 inch Dia. for one 60 watt lamp up to three 100 watt lamps.



Multi ile-lite scientifically designed for efficiency lighting of library shelves & stockroom aisles. Available with pendant, box cover, angle, or feed thru socket fitting, also with pull chain socket.

Lamp sizes—100-150-200 W.

### SPECIAL BULLETINS YOURS UPON REQUEST

No. 954—6-page Condensed Catalog

No. 754—Multi Ceiling Fixture

No. 535—New Complete on Sparlites

For Air Mail Reply

Address request to Dept. RK

## FOR FLOODLIGHTING



**Cat. No. 539B-1000 W.**

Alzak finish aluminum reflector, cast aluminum socket housing. Specially designed for athletic fields, billboards, playgrounds, racing tracks etc. Heat & impact resistant lens, sturdy position-locking handles & many other quality features.

Lamp sizes 300-500 W.  
750-1500 W.  
Medium or narrow spread



**Cat. No. 610**

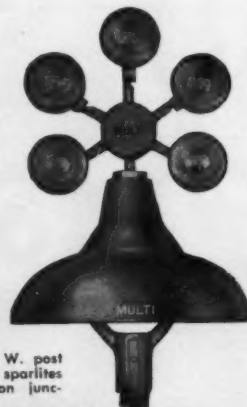
For

PAR 38 - 150 Watt

R40 - 150 Watt

Lamps

Cast aluminum sparlites all weathertight with silicone rubber gasket. Ready wired. For accent spot & floodlight. Complete with mounting accessories & fittings. Also for Mogul R40 & PAR 56 lamps.



**Cat. No. 3875**

Complete unit as shown.

Multi 500 W. post light with sparlites mounted on junction box.

# MULTI

**ELECTRIC MFG. INC.**  
4223 W. LAKE ST. CHICAGO 24



# NATVAR CORPORATION

FORMERLY THE NATIONAL VARNISHED PRODUCTS CORPORATION

TELEPHONE

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CABLE ADDRESS

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## NATVAR FLEXIBLE ELECTRICAL INSULATING MATERIALS

### VARNISHED FABRICS AND PAPERS

#### VARNISHED CAMBRIC

Straight cut for application to regular smooth surfaces; bias for irregular surfaces. Supplied in all standard sizes and thicknesses, in yellow or black and in greasy, mica-dusted, or dry finishes. Yellow has higher resistance to mineral oils and is therefore used extensively in oil immersed apparatus; black has better electrical qualities and is therefore recommended for applications where dielectric strength, power factor and preservation of these qualities even under humid conditions is important. Natvar varnished cambric is manufactured to conform to the latest revisions of NEMA Standards and A.S.T.M. Specifications. Full width rolls, 25 yd. and 50 yd.; sheets, 36" x 36" and 24" x 36", standard; other lengths and sizes on special order.

#### VARNISHED CAMBRIC TAPE

Straight cut or seamless bias, in all standard widths and thicknesses, yellow or black, greasy, mica-dusted or dry. Characteristics same as for varnished cambric. Accurately slit for use in taping heads. Standard lengths 36 yd. and 72 yd. rolls.

#### VARNISHED CANVAS AND DUCK

Recommended for applications where electrical insulation is subject to severe mechanical strain and abuse. Widely used as phase insulation in rotating machines. These high strength fabrics are coated with the same high grade varnishes as Natvar varnished cambric. Full width rolls, 25 yd. and 50 yd.; sheets 36" x 36" and 24" x 36", standard; other lengths and sizes on special order.

#### VARNISHED SILK

Thin, high dielectric strength insulation with great flexibility and mechanical strength. Particularly applicable to relays, magnetos and other components used in airborne equipment, where space and weight are important considerations. Available in yellow only; finish, dry. Full width rolls, 25 yd. and 50 yd.; tapes, 25 yd. and 50 yd.; bias cut strips approximately 51 in.; standard; other lengths on special order.

#### VARNISHED RAYON

Developed as an alternate for varnished silk, and used in substantially the same applications. High tensile and dielectric strength with exceptional smoothness. Available in yellow only; finish, dry. Full width rolls, 25 yd. and 50 yd.; tapes, 25 yd. and 50 yd.; bias cut strips approximately 51 in., standard; other lengths on special order.

#### VARNISHED FIBERGLAS

Class B insulation (130°C) used primarily to insulate equipment which operates at temperatures above the normal safe working range of varnished cambric. Permits higher current densities with consequent reduction in size and weight. Has great mechanical strength and excellent dielectric properties. Available in standard weave or open-weave; yellow or black; in all standard commercial sizes and thicknesses; standard finish, dry; mica-dusted on specification. Full width rolls, 25 yd. and 50 yd.; sheets, 36" x 36" and 24" x 36"; tapes, 36 yd. and 72 yd.; standard; other lengths and sizes on special order.

#### SILICONE COATED FIBERGLAS

Class H insulation (180°C) used wherever reduction of size and weight are vitally important. Retains its excellent mechanical and dielectric properties at higher temperatures. Full width rolls, 25 yd. and 50 yd.; tapes, 36 yd. and 72 yd., standard; other lengths on special order.

#### VARNISHED PAPERS

Chemically inert rope and kraft stocks selected for uniform thickness, tensile and dielectric strength and coated with highest grade electrical varnish. Yellow varnished condenser type tissues, single or multiple ply; yellow or black varnished heavy papers, single ply. Full width rolls, single ply, 25 yd. and 50 yd.; multiple ply, 25 yd.; sheets, 36" x 36" and 24" x 36"; tapes, 36 yd. and 72 yd., standard; other sizes and lengths on special order.

### COMBINATION INSULATIONS

Slot cell insulation is a combination of 100% rag paper stock firmly cemented to a layer of varnished cambric, either straight or bias cut. The high dielectric strength and moisture resistance of Natvar varnished cambric with the toughness and abrasion resistance of rag paper make a slot insulator which will withstand pounding and chafing without impairment of its electrical properties. Available in black and yellow; full width rolls, 25 yd. and 50 yd.; sheets, 36" x 36" and 24" x 36", standard; other lengths and sizes on special order.

Aboglas® insulation is a new class B insulation (130°C) consisting of a layer of varnish saturated asbestos paper sandwiched and securely bonded between two layers of varnished open-weave Fiberglas. It is less expensive than mica combinations and does not flake. Excellent resistance to breakdown even under extreme heat, moisture, abrasive dust, oil and grease. Standard sheets approximately 36" x 36"; other sizes on special order.

Other duplex and triplex composite insulations such as silicone coated Fiberglas, Quinorgo, Mylar, etc. are also available.

### FLEXIBLE TUBING AND SLEEVING VARNISHED OR LACQUERED

Electrical grade rayon (class A) or Fiberglas (class B) braid coated or saturated with high grade electrical varnish or lacquer. Available in all NEMA grades and standard A.S.T.M. sizes. Wide range of vivid colors for coding. Standard lengths, 36"; sizes #20 to #10 available in 500 ft. spools in lacquered only. Cut pieces ¾" or longer furnished on specification.

### EXTRUDED PLASTIC TUBING AND TAPE

#### NATVAR 400 VINYL TUBING AND TAPE

Natvar 400, for applications requiring high resistance to both heat and oil, is approved by Underwriters' Laboratories for continuous operating temperatures of 105°C. It remains flexible under continuous operation immersed in hot oil. It is a well balanced plastic that is tough, elastic, flexible, resistant to abrasion and tear, inert and resistant to ozone, oils, waxes, alkalies, acids and most solvents. Available in transparent, black, opaque white, yellow, red, green, blue, brown, and gray. Tubing is stocked #24 to #15 in 500 ft. spools; #14 to ½" in 100 ft. coils; 9/16" to 1¼" in 50 ft. coils; 1½" and larger in 25 ft. coils; cut pieces ¾" or longer on specification. Tapes, standard length, 36 yd.; standard color, black.

#### NATVAR 200 VINYL TUBING

Natvar 200 is a general purpose tubing with excellent flexibility through a temperature range of -40°C to +85°C. Will not support combustion. Shows no disintegration or flaking when immersed in oil. In general has the same inherent characteristics as Natvar 400, but slightly higher tensile strength, averaging 3600 p.s.i. Stocked in same lengths and colors as Natvar 400. Cut pieces ¾" or longer furnished on specification.

#### NATVAR STYROFLEX® FILM

Specially processed flexible polystyrene film developed for insulation of UHF coaxial cables and capacitors. Excellent mechanical and electrical properties. Available in thicknesses .0004" and thicker in precision cut tapes up to approximately 10" width.

### EXTRUDED PRINTED MARKERS

Printed with indelible vinyl ink on Natvar extruded tubing cut to specified lengths. All combinations of letters, numbers, and symbols available for identification of circuits, terminals, airplane electrical systems, etc. Wide color range for coding.

### SPECIAL PRODUCTS

In addition to Natvar standard products, there are many Natvar products developed for a special application. These materials, now in limited production, are available on special orders.

Where specifications call for materials with special mechanical or electrical characteristics, check with our representative in your area, or directly with us. If the materials you are looking for are not already in production, our engineers will be glad to work with your engineers to provide a practical answer.



# O.Z. ELECTRICAL MANUFACTURING CO.

262 BOND STREET, BROOKLYN 17, N. Y.

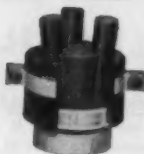
Representatives in all Principal Cities

**They're O.K. if They're O.Z.**

CONDUIT FITTINGS • CABLE TERMINATORS  
CAST IRON BOXES • POWER CONNECTORS  
SOLDERLESS CONNECTORS  
GROUNDING DEVICES



CABLE SUPPORTS  
CONDUIT TYPE



CABLE SUPPORTS  
SPLIT TYPE

## CONDUIT FITTINGS



INSULATED  
BUSHINGS



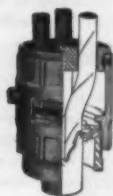
BAKELITE  
BUSHINGS



SPLIT  
COUPLINGS

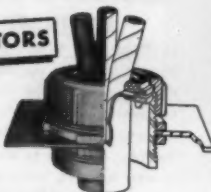


EXPANSION  
FITTINGS



TERMINATING  
POTHEADS

## CABLE TERMINATORS



SEALING  
BUSHINGS



COMBINATION  
LUGS



COMBINATION  
TWO-WAY  
CONNECTORS

## SOLDERLESS CONNECTORS



EXPLOSION PROOF  
TYPE

## CAST IRON BOXES



WEATHER PROOF  
TYPE



COMBINATION  
TEE AND  
PARALLEL CONNECTORS



SERVICE TAP

## POWER CONNECTORS



T-CONNECTORS, TUBE  
TO MULTIPLE CABLE TYPE



BUS BAR  
CLAMPS

## GROUND CONNECTORS



# OKONITE CABLES

## GENERAL POWER AND LIGHTING CABLES

(Interior and Exterior)



### DUCT AND CONDUIT

**Okolite-Okoprene** cables in all sizes and designs, single conductor or multi-conductor with Okoprene sheath, braid or lead sheath overall, for service up to 35,000 volts and copper temperatures up to 75° C. Okoprene sheath bonded to Okolite rubber insulation and vulcanized together in a continuous metal mold. Excellent resistance to ozone, flame, oil and weather. No fibrous coverings to deteriorate. Requires no lead sheath in wet locations. Easy to splice and terminate. Also used for aerial or direct burial installations.

**Okover** varnished cambric cables in all sizes and required number of conductors for operation up to 28,000 volts at a copper temperature of 85° C. High resistance to ozone, heat and oil. High current carrying capacity and dielectric strength.



### OVERHEAD

**Okolite-Okoprene Self-Supporting** aerial cables in various constructions, single or multi-conductor or assembled singles, for operation up to 35,000 volts at conductor temperatures up to 75° C. Cable messenger and binder tape factory-assembled for easy, all-in-one installation. Clearance problems reduced. Space saved in congested areas. Open or weather-proof wire circuits replaced. Full electrical protection. Better voltage regulation. "Dualay" construction allows tapping while "hot." Designed especially for power distribution in heavy tree areas and for overhead distribution between buildings and substations.

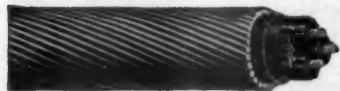
**Service Drop and Entrance** cables in all sizes and styles, armored or unarmored, for overhead or underground connections.



### DIRECT BURIAL

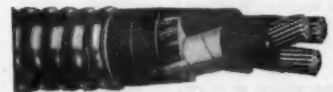
**Okolite-Okoprene** neoprene-sheathed cables in all sizes and designs for operation up to 35,000 volts at copper temperatures up to 75° C. Provide high electrical stability and superior resistance to moisture, acid and corrosive soil conditions. No magnetic sheath losses. Light, flexible, economical. Easy to install and splice. Underground power distribution for airport, highway, series street lighting, and building entrances.

Other direct burial constructions available: Okosheath, Parkway, Hazasheath, Amortite.



### SUBMARINE

**Okolite-insulated** cables (no lead sheath required) in all sizes and designs for service up to 35,000 volts at copper temperatures up to 75° C. Protected with jute and galvanized steel armor wire. Excellent moisture and heat-resistance. High current carrying capacity and breakdown voltage. Low specific inductive capacity, power factor and dielectric loss.



### OKONEX-LOXARMOR

**Okonex-Loxarmor** is an economical cable for installations where the mechanical protection of a rigid conduit is not desired or where a copper conductor operating temperature of 85° C. is required. Okonex butyl-base insulation is applied by Okonite's strip-insulating process. Galvanized steel, aluminum, bronze or copper Loxarmor can be supplied. For use up to 15,000 volts as primary and secondary feeders, power and lighting circuits, station auxiliaries, control circuits, motor circuits.

## SIGNAL AND CONTROL CABLES



**Okolite-Okoprene** cables in all sizes and number of conductors. Conductors protected with individual Okoprene flame- and weather-resistant sheaths. Color-coded per I P C E A specifications. Protected with overall sheath of tough, weather-resistant Okoprene or other protective coverings such as lead, interlocked armor, braid, parkway or wire armor.



**Okotherm aluminum-sheathed cable** eliminates conduit, is available in single or multiple conductor construction for use up to 200° C. (392°F.). Conductor insulation is Okotherm silicone-rubber compound, covered with color-coded glass braid. Sheath is 99.6% pure seamless aluminum. For use up to 15kv wherever unusually high temperatures are encountered: boiler rooms, steel mills, pulp and paper mills, oil refineries, processing plants.

## PORTABLE CABLES



**Hazacord** flexible cords and portable cables in all sizes and types with or without grounding conductors or shielding, for use up to 15,000 volts at copper temperature of 60° C. Mold-cured Hazaprene ZBF Sheath resists weather, flame, oil, and mechanical damage. Designed especially for cutting and loading machines, shuttle cars, reel locomotives, conveyor systems, electric shovels, dredges and drag lines, welding machines and all portable electric tools.

## COMMUNICATIONS CABLES



**Hazatel or Hazatelax** multi-conductor communications cables with Hazatelax N neoprene-protected rubber insulation for all types of telephone and communication services with any number of conductors, with individual, paired, or quadded constructions as needed. Full electrical protection plus extra protection against sun-checking, oil and moisture at terminals. Small diameter. Overall sheath of lead or of weather-resistant Hazaprene (made with neoprene).

## HIGH TENSION PAPER CABLES

**Okonite** oil-impregnated, paper-insulated cables of all types, sizes and constructions for service up to 230,000 volts at copper temperatures up to 85° C. High dielectric strength and current carrying capacity. Available in all types, solid, oil-filled, gas pressure, and high pressure pipe type (both oil and gas transmission systems. For high voltage underground, aerial or submarine transmission lines.

## X-RAY AND HIGH FREQUENCY CABLES



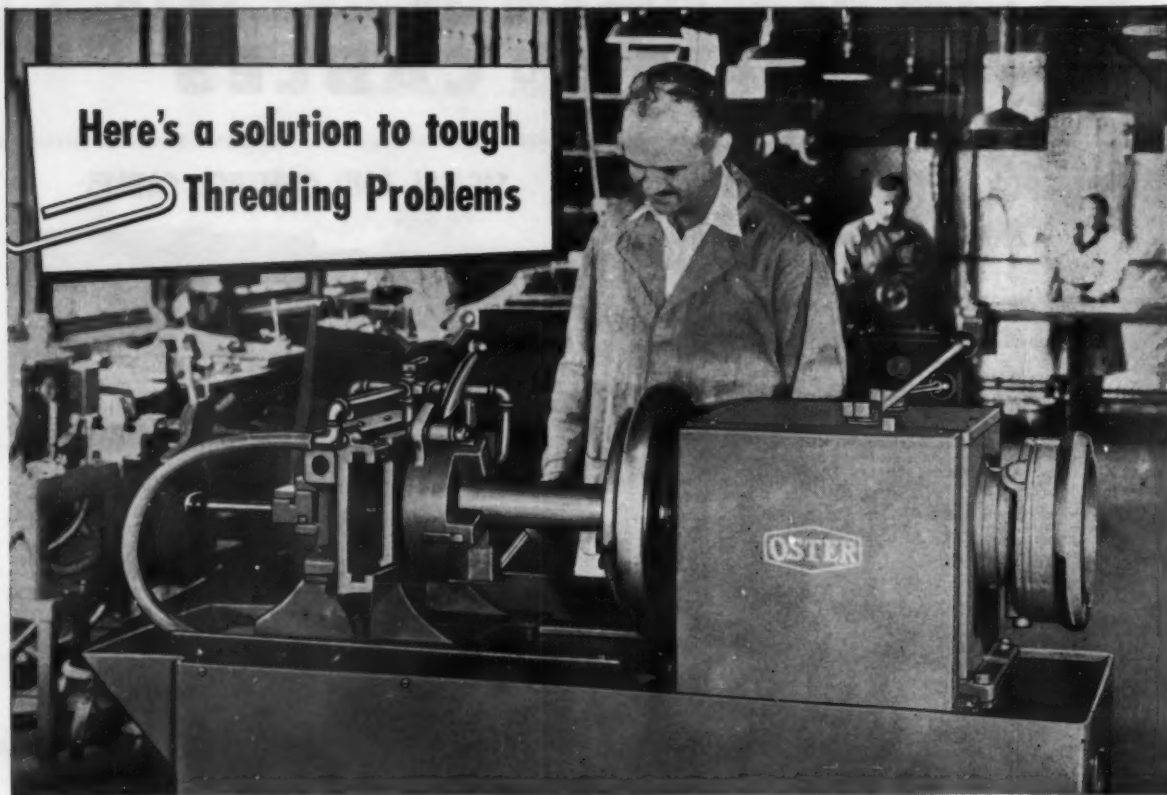
**Okolite-insulated** shock - proof X - ray leads. Flexible, ozone - resistant. High dielectric strength.

**Okolene (polyethylene)**-insulated wires and cables in all sizes and designs for high frequency service. Low capacity and power factor. High dielectric strength. Excellent moisture resistance. Used on coaxial cables for radar, carrier frequencies, television. Also small diameter communication cables.

## POWER CABLES ARE ALSO AVAILABLE WITH ALUMINUM CONDUCTORS

THE OKONITE COMPANY, 1955 Canal St., Passaic, N. J.

Here's a solution to tough  
Threading Problems



## THE LOW COST **OSTER** THRIFT MODEL

A money-saving member of the complete line of Oster threading machines is the No. 784 Thrift Model. Now available at minimum investment, it's a machine designed to thread pipe and conduit quickly . . . efficiently.

Features of the Thrift Model assure threads of highest quality even when the machine is operated under rough conditions. For instance, the front gripping chuck of the new Oster Thrift model is fast and positive. Operated by hand-wheel, it requires no wrench and handles pipe size change quickly and easily. The rear centering chuck of the Thrift Model is universal,

wrenchless, quick-acting . . . non-binding. Two quick opening, detachable, lever operated die heads cover the entire pipe range of 1" to 4". Extra range of the Thrift Model is ½" and ¾". These die heads are provided with both positive locking device and means for adjusting all dies simultaneously for over or under-size threads.

The Oster Thrift Model is quality built to handle tough jobs for the man who has a small budget. For a free, fully illustrated, factual booklet about the Thrift Model, write us today.



**For Rugged Economical Portable Threading Machines Look to Oster**



### 80 lb. "Featherweight Champ" No. 142

The all-new Oster "Featherweight Champ", a Power Drive for Hand Pipe Tools, weighs only 80 pounds. One man can move it and use it with ease . . . yet the "Featherweight Champ" is exceptionally sturdy and powerful. Ideal for "on the spot" threading, its range is ½" to 2". It's available with either electric, gasoline or air power.



### "Lightweight Champ" No. 432

The Oster "Lightweight Champ" has new wrenchless chuck that grips and holds tight in either right or left hand direction, revolving non-binding rear chuck. It has an indestructible steel case . . . guaranteed for life of machine. Standard range ½" to 2". Range with drive shaft 2½" to 8".

THE



MANUFACTURING CO.

Main Office and Factory:

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New York Factory Branch Sales and Services, 25-36 Jackson Ave., Long Island City 1, N. Y.

**Builders of Cost Reducing Threading Equipment Since 1893**

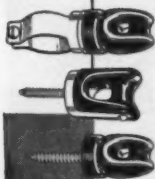


# Reliable distributors everywhere stock THIS quality line...



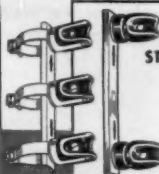
## Porcelain Products, Inc.

FINDLAY, OHIO



### WIREHOLDERS, STANDARD AND PIPE-MOUNTING—

The most complete line of quality wireholders available anywhere. Sharp, clean threads speed installation. Large, smooth wire-ways protect conductors. 38 styles and sizes to choose from.



### HOUSE BRACKETS, STANDARD AND PIPE-MOUNTING—

A size for every job. Finest high-strength electrical porcelain. Double, hot-dip galvanized metal parts. Pipe clamp styles provide newest, most economical means of attaching conductors to pipe supports.



### FOUR-IN-ONE SPOOLS—

A wonderful new product. The ideal answer to multiple service take-offs in congested areas, or new residential communities. Reduces possibilities of shock hazards, saves over a foot of conductor on each service drop.



### INSULATED SECONDARY RACKS—

For heavy, medium or light duty. 37 styles and sizes to choose from. Made to give trouble-free service for decades.



### SPOOL INSULATORS—

For every job. Dry process or wet process electrical porcelain. Fourteen standard sizes to choose from.



### INSULATED CLEVISES—

Finest quality, double hot-dip galvanized metal parts. Eleven styles and sizes fit any need.



### SURFOLET WIRING DEVICES—

the most modern, complete and practical line of wiring devices for surface wiring in basements, attics, garages, barns, etc. Quality interiors and superior workmanship for long life. Sparkling white porcelain bodies for attractive appearance.

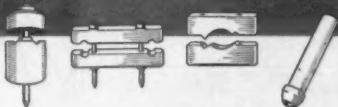
### SOMETHING NEW IN OUTLETS—

Nail assembled outlet, ready to hammer "home" for rapid installations. Made of rugged, durable, safe ceramics. Time-savers. Money-savers.



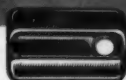
### NON-METALLIC OUTLET BOXES AND COVERS—

Recommended by NEC for safer, more durable wiring installations. Available for surface and concealed wiring—once used, always used.



### KNOB, TUBES AND CLEATS—

The most complete line in the industry—sizes for every application. Finest quality electrical porcelain. Ask us for booklet on porcelain-protected wiring systems.



### GUY STRAIN INSULATORS—

Rugged, high-strength, homogenous electrical porcelain. Maximum mechanical strength and insulation value.



### COMMUNICATIONS INSULATORS—

Made to A.T. & T. specifications. A complete line for any communications job.

# PRECISION on your transformer is more than a name ...it's a guarantee!

## PRECISION...

the only transformer backed by a 5-year guarantee! Only Precision offers this important long-range protection . . . your assurance of superior design, material and workmanship. Reduce costly repair work . . . power failure worries . . . work stoppages! Be precise — install Precision.

### Full Rated Load

Carry full loads continuously . . . capable of handling emergency over-loads.

### Economical

Low initial cost . . . inexpensive operation and maintenance.

### Dependable

Ruggedly constructed to exceed latest NEMA standards!

### Quiet

Unsurpassed for smooth, silent operation.

### Easy to Service

New handy panel board gives quick access to all taps.

### PRECISION 5 year GUARANTEE

Manufactured products bearing the trademark or nameplate of this company have been thoroughly inspected and are guaranteed to be free from defects in workmanship or materials. The Company's liability under this guarantee is limited strictly to replacing without charge or repairing upon return to the factory, transportation charges prepaid, any part or parts which within five (5) years from date of shipment from our factory, shall be found to have defective workmanship or material or shall otherwise fail to meet specifications. We are not responsible for repairs or replacements made by others without our written authorization.



SINGLE AND 3 PHASE

1/4 to 1500 KVA . . . Voltages to 15 KV.

Available with any make switchgear in substation units.

Write today for FREE Catalog and valuable technical data charts.

# PTC

## PRECISION TRANSFORMER CORP.

660 West Grand Avenue • Chicago 10, Ill. • SEeley 8-2740



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(DAUGHTERS OF THE AMERICAN REVOLUTION)

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When it comes to lighting large and lofty interiors the Rambusch Downlite has no equal. It is efficient, safe, economical, simple to maintain, glare shielded and guaranteed to produce the promised results. • There are 100 Rambusch lighting representatives in the country—one of them is near you and anxious to serve you.

**RAMBUSCH** DESIGNERS • MANUFACTURERS  
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# Simpler WIRES AND CABLES

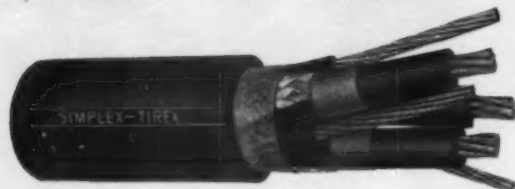
## ★ TIREX CORDS



TIREX Cords were the first in this country to have a hard-service rubber jacket. The cured-in-lead process was developed to make this rubber jacket even tougher.

Because of this extra tough Selenium Neoprene Armor, TIREX Cords are used on all types of portable equipment with outstanding success. Simplex-TIREX Type SO Cords can have as many as eight conductors in conductor size #18 through #10. They are rated at 600 V.W.P. Simplex-TIREX Type SJO Cords are made for lighter service and are rated at 300 V.W.P.

## ★ SIMPLEX-TIREX CABLES

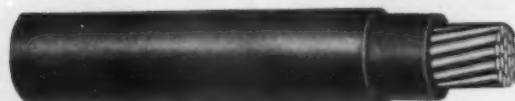


Like TIREX Cords, Simplex-TIREX Cables have a cured-in-lead Selenium Neoprene Armor to withstand the roughest sort of treatment.

They are made in all sizes and types. They may have grounding conductors and/or shields. They are made for use from 600 to 15,000 volts.

They are made for almost all types of mobile equipment. Some of these uses are welding, shuttle car, mining machinery of all types, shovel cables, etc.

## ★ SIMPLEX-ANHYDROPRENE Type RHW—Style WD-75



This style is recognized by the Underwriters as Type RHW. It may be used for general-purpose wiring in either wet or dry locations at a copper operating temperature of 750°C. (167°F.). It is the only rubber-insulated wire so listed by the Underwriters. This wire is designed to be used underground in ducts and above ground in conduits.

## ★ SIMPLEX-ANHYDREX CABLE Type Use—Style RR



This cable can be buried directly in the ground or it can be pulled into ducts. It can also be used as aerial cable when supported by a messenger wire. Listed by the Underwriters as Type USE. Special Simplex neoprene jacket resists fungus, sunlight, heat, etc.

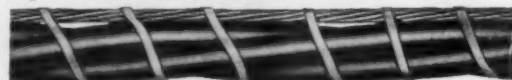
## ★ SIMPLEX CONTROL CABLES



Simplex Control Cables are made in three styles—Anhydrex-insulated, neoprene jacketed; Polyethylene-insulated, Plastex-jacketed; and Plastex-insulated, plastex-jacketed. They are made in all recognized conductor sizes and can have any number of conductors. Color coded per I.P.C.E.A.

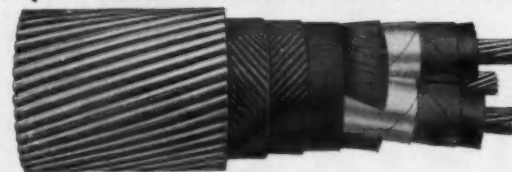
Used for remote control, telemetering and communication.

## ★ AERIAL CABLES



Simplex Aerial Cables are furnished in various constructions of single-conductor, multiple singles or multiconductor. Made as pre-assembled aerial cables with the messenger factory-attached to cable by binder tape. Cable also furnished for field assembly by spinner or with messenger and rings. Voltage range to 20,000 volts and over. Simplex Aerial Cables have no fabrics or braids to rot or festoon.

## ★ SIMPLEX SUBMARINE CABLES



Simplex made its first submarine cable well before the turn of the last century. One of the first was a submarine telephone cable. Since then we've made every conceivable kind for laying under rivers, harbors, lakes and oceans. They have been insulated with paper, varnished cambric or rubber, and protected by galvanized steel and jute or a reinforced jacket. Made for operating voltages up to 20,000 volts and over.

**SIMPLEX WIRE & CABLE CO., 79 Sidney Street, Cambridge 39, Mass.**



#### NEW DELUXE TROUBLE LAMP

With Cast Aluminum Guard. Built to last a lifetime!  
New grounding type side outlet an extra added feature.

#### POWER BLOCK

Industrial Type Multiple Outlet Extension Sets.  
10 different outlet combinations.



#### WATERTIGHT CONNECTORS

Durable flexible rubber overlap.  
Seals out Moisture! Seals out Dust!  
Available in Rubber or Neoprene and in ten different blade arrangements — including our Turn-Tyte.



## Rodale ADDS THREE NEW EXCLUSIVES... TO ITS LINE OF QUALITY WIRING DEVICES

#### GROUNDING DEVICES 15 AMP.—125V



#### TURN TYTE INTERLOCKING DEVICES



#### RANGE AND DRYER CONNECTIONS 30 AMP. and 50 AMP.



#### OTHER RODALE PRODUCTS



# Rodale

**MANUFACTURING CO., Inc.**  
EMMAUS, PENNSYLVANIA

Warehouses in Chicago & Los Angeles  
Representatives in all Principal Cities  
Selling Exclusively Through the  
Electrical Jobber

# ELECTRICAL WIRES AND CABLES

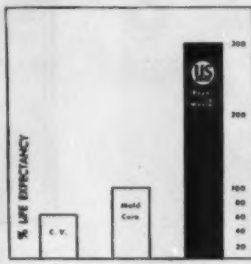
The United States Rubber Company manufactures a complete line of electrical wires and cables. It has pioneered in the development and continued improvement of natural and synthetic rubber-insulated wire and cable, as well as plastic-insulated wire and cable. Selected items from the complete line are shown here. For further information refer to our nearest District Sales Office or Sales Agent shown below.

## PORTABLE CORDS AND CABLES

### U. S. LAYTEX ROYAL MASTER



U. S. Laytex Royal Master's rugged, lead-cured jacket of 60% neoprene assures highest protection against sunlight, heat, oils, acids, alkalis, etc. Fine strands of tinned copper are helically wound around a fibrous core for maximum resistance to flexing, impact, abrasion and cord breakage. Patented Laytex® 90% natural rubber insulation guarantees unbeatable physical, aging and electrical properties. A 3-mil wall of neoprene latex over the insulation affords added protection. The insulated conductors are twisted with rayon tire cord fillers, then spirally wrapped with cotton and jacketed with neoprene. Laytex Royal Master conforms with all industry practices concerning jacket thickness and overall diameter. Patent applied for.



The new Laytex Royal Master outlives the average molded cord virtually 3 to 1 and the average short-lived continuous vulcanized cord 4.75 to 1!

Type SO, 600 volts, heavy duty, U. S. Rubber Specification #920. Type SJO, 300 volts, light duty, U. S. Rubber Specification #921. All Laytex Royal Master cords are listed and labeled by Underwriters' Laboratories, Inc.

More than 12,000 tests, in the laboratory and in rugged plant installations, show Royal Master gives...

- 33% greater heat resistance
- 197% greater impact strength
- 58% greater abrasion resistance
- 50% greater resistance to cutting
- 118% greater resistance to tearing
- 38% greater tension or breaking strength

- 26% greater oil resistance
- 488% greater resistance to flexing
- 199% longer life

...than the average of all other mold-cured cords—longer life than any other cord—surpassing even a hypothetical cord incorporating the best features of all competitive cords tested!

### U. S. ROYAL THREE-CONDUCTOR ROUND PORTABLE CABLE

#### Type W



Flexible coated annealed copper conductors separately insulated with colored performance grade compound, twisted together with rubber filler in the core and covered with reinforced 60% neoprene jacket cured in lead sheath, assuring maximum density and ruggedness. Designed for 600-volt service, 60° C. U. S. Rubber Specification #731.

### U. S. ROYAL GOLD FLUTED WELDING CABLE



A top-grade, extra-flexible cable engineered to give the longest possible life and durability. This cable is protected by a fluted Royal Gold 60% cured-in-lead rubber jacket so designed to allow cooler operation and a high degree of visibility while also offering added resistance to impact, abrasion and sunlight, etc. U. S. Rubber Specification #751.

## U. S. ALUMINUM WIRES AND CABLES



Aluminum conductors have been successfully used in weatherproof wires, rubber- and thermoplastic-insulated power and lighting wires, service entrance cable, aircraft wires.

Experience gained in testing and using these wires and cables, on the job and in the laboratory, has demonstrated that aluminum conductors are efficient and dependable in most electrical applications.

## POWER AND CONTROL CABLES



### U. S. Grizzly® Uskorona® Power Cable

For overhead and underground high-voltage power applications, control circuits and general purpose wiring up to 8,000 volts between phases. Light in weight, easy to install and join, resistant to ozone, moisture, heat, sunlight, oils, acids, alkalis and corrosive chemicals.

Oil base Uskorona-1, 75°C

U. S. Rubber Specification #830

Butyl Uskorona-2, 85°C

U. S. Rubber Specification #831



### U. S. Laytex® Supervisory Control Cable

Used in systems for the selective control and automatic indication of remotely controlled units. Composed of solid annealed coated copper conductors individually insulated with 90% unmilled grainless rubber compound and covered with treated color-coded rayon braid. Required number of conductors (2 to 20) is cabled together with suitable treated filler, as necessary, and covered with compound-filled tape. Each layer of more than 8 conductors is covered with rubber-filled tape. The core thus formed is covered with neoprene jacket or lead alloy sheath. Suitable for 600-volt service. U. S. Rubber Specification #930.

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## UNITED STATES RUBBER COMPANY

Electrical Wire and Cable Department

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# THE STANDARD TRANSFORMER CO.

WARREN, OHIO, U. S. A.

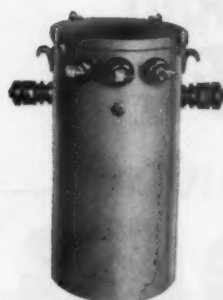
## Standard

TRADE MARK ®

### TRANSFORMERS FOR EVERY CLASS OF SERVICE

*For a complete description of the design and construction used in the manufacture of each type of transformer, write for the bulletins listed.*

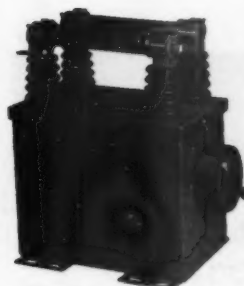
Askarel Cooled Transformer.....	No. S-101
Dry Type Transformers.....	No. S-202
Rural Transformers.....	No. S-301
Distribution Transformers.....	No. S-401
Power Transformers.....	No. S-402
Current and Potential Transformers.....	No. S-501
Type NAS Current Transformers.....	No. S-502
Testing Transformers.....	No. S-601
Street Lighting Transformers.....	No. S-701



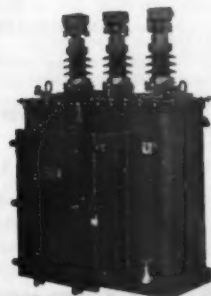
Type A-EEI-NEMA —  
Conventional Distribution  
Transformer.



Type HT — Askarel  
Cooled, Load Center  
Transformer.



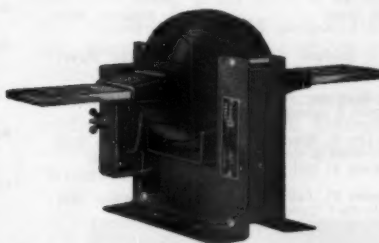
Type P — Indoor Poten-  
tial Transformer with  
current-limiting fuses.



Type PCW OISC — Three  
Phase Metering Set.



Type AT 2000 KVA Power Transformer, 24,000  
to 2400 volts, three phase.

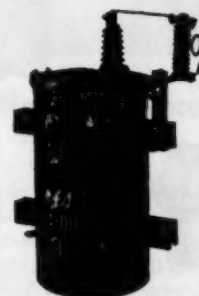


Type CW-350 Current Transformer.

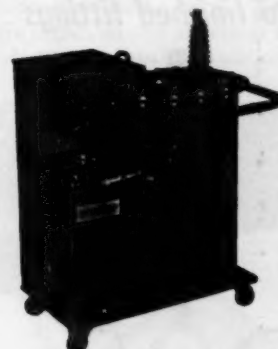
• STANDARD transformers—designed by experts, built by craftsmen—for the exact needs of utilities, manufacturers, industrial and commercial applications. Write for literature or the name of the Standard representative in your area.



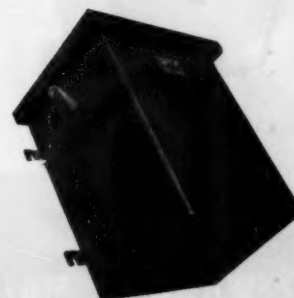
Type MGT — Dry Type  
air cooled, Load Center  
Unit Sub-Station, 1000  
KVA.



Type AR OISC — Rural  
Line Distribution Trans-  
former.



Type HV — Test Set for  
High Potential Testing.



Type MG — Dry Type, air  
cooled transformer, 15  
KVA.



# WAGNER

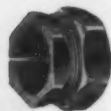
## the complete line of E.M.T. FITTINGS



E.M.T. 90° Rain-Tight Long Connectors



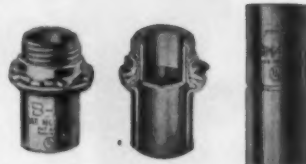
E.M.T. 90° Rain-Tight Short Connectors



Two-piece compression connectors—three sizes, concrete tight



SET SCREW TYPE



The WAGNER B-M Line

We are licensed to merchandise original B-M all steel thin wall fittings and tools



Connectors for Thin Wall Conduit—Rain Tight



Couplings for Thin Wall Conduit—Rain Tight

COMPRESSION TYPE

*from molten metal  
to finished fittings*

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... located in various parts of the country, cooperate with us in rendering the kind of service you like, and they will always be glad to work with you in solving any problems that may arise.



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Edgar E. Dawes & Co., 401-402 Rhodes Building
- Baltimore 18, Maryland Phone - Tuxedo 9-0260  
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- ★Boston 10, Mass. Phone - Liberty 2-1910  
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- Charlotte, North Carolina Phone - Franklin 6-8428  
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- ★Chicago 6, Illinois Phone - State 2-5671  
J. A. Jaques Company, 622 W. Monroe Street
- ★Cincinnati 2, Ohio Phone - Main 1-5250  
Arthur L. Ehlers Company, 49 Central Avenue
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Kilkenney Company, 1729 Superior Ave., N.E.
- ★Dallas 2, Texas Phone - Riverside 5931  
George E. Anderson Co., 1903 Griffin Street
- ★Denver 2, Colorado Phone - Tabor 5-3991  
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- ★Detroit, Michigan Phone - Townsend 8-6258  
Hemphill & Company, 12638 Hamilton Ave.
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W. F. Howe & Company, 500 Porter Building,  
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- ★Philadelphia 7, Pa. Phone - Lombard 3-7473  
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- ★San Francisco 3, California Phone - Underhill 1-2367  
Hodges & Glomb, Inc., 921 Bryant St.
- ★Seattle 4, Washington Phone - Elliott 8882  
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Georgetown Station
- Toronto 3, Canada Phone - Lloydbrook 2139  
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- Hawaiian Representative Phone - Douglas 2-4220  
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San Francisco 7, California
- Export Phone - Barclay 7-7293  
Langguth-Olson Company, 11 Park Place,  
New York 7, New York

★ Consigned Stock is located at these points for your convenience.

## WAGNER MALLEABLE PRODUCTS CO.

General Sales Office: 222 W. Adams St., Chicago 6, Ill.  
Foundry and Plant: Decatur 60, Ill.

**Here's the team  
that will help you  
lower your Bid—  
*maintain your Profit!***

BECAUSE getting the job done faster, for less, is a big factor in meeting today's increasing competition, these time-and-labor-saving tools are vital to your contracting picture. Whatever the job, remodeling, modernizing, maintenance or repair, this Velocity Power team can help you keep your bid down, and still maintain your profit levels on every job.



## THE **VELOCITY-POWER** DRIVER

### Drives Steel Studs into Steel, Concrete, Masonry in Seconds

Here's the tool that lets you finish off those anchoring and fastening jobs simply, easily, instantly! Just load—position—fire! Stud's embedded, job's done! Interchangeable barrels permit driving either ¼ or ⅜-inch studs from same firing unit. You have a wide-range of studs available—solid head, internal or external threaded types. And because of the integral cartridge and stud, you have no matching or fitting—they're ready for use.

Look at these safety features. A spring-loaded safety arm that must be rotated 180 degrees and held before firing, prevents accidental discharge. Permanently mounted spall-shield adds to the safety value. All cartridges are center-fire type, completely assembled, and color tipped to assure the right load for the job. Unique barrel design avoids ricochet, flash, recoil. Write today for details on this important aid for production and maintenance jobs.

## **TORCH-O-MATIC**

### For Faster, Easier Soldering, Brazing, Melting

This fully-automatic on-off air-acetylene gas torch gives you instant, one-hand operation, saves you time and gas, and eliminates open-flame hazards when not in use. Just pull the trigger and the air-acetylene gas lights instantly, ready for the job. Release the trigger and it's out! It's as simple as that, and remember, no "time-out" to light up

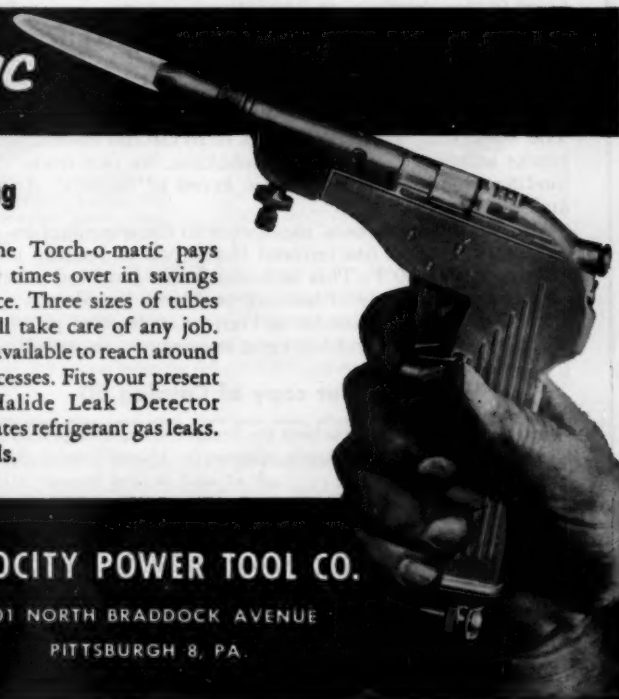
and adjust. The Torch-o-matic pays for itself many times over in savings and convenience. Three sizes of tubes and nozzles will take care of any job. Extension tips available to reach around corners, into recesses. Fits your present equipment. Halide Leak Detector attachment locates refrigerant gas leaks. Write for details.

#### IF YOU USE PROPANE...

Torch-o-matic is also available for use with propane gas. This Torch features trigger-control that ignites flame, extends flame from pin-point to a full 6 inches, and shuts flame off when trigger is released. You save time, gas, increase safety. Unit connects to tank—no intermediate valve fittings. Write for details.

## **VELOCITY POWER TOOL CO.**

201 NORTH BRADDOCK AVENUE  
PITTSBURGH 8, PA.





# What's your heating need?



## There's a Chromalox heater for every heating job

Only Chromalox offers you packaged electric heaters and elements in more than 15,000 types, sizes and ratings . . . and for immediate delivery. The world's largest factory stock of industrial electric heaters, plus local stocks at strategic points. In addition, we can make limitless custom modifications of the four basic types of heaters: strip, ring, tubular and cartridge.

Our thirty-eight years' experience in the manufacture and application of electric heaters has covered thousands of heating problems to temperatures of 1100°F. This technical know-how and practical experience in solving thousands of heating problems are always available to you without obligation. Just let us know your heating problem, and we'll go all out to help you find the right answer . . . electrically.

### Write for your copy of Catalog 50

Contains helpful information on design, uses, and prices of Chromalox Electric heaters, elements, thermostats, contactors and switches.



**CHROMALOX—Electric Heat for Modern Industry**

**Edwin L. Wiegand Company**

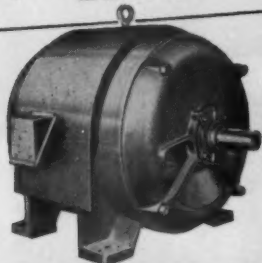
7765 Thomas Boulevard, Pittsburgh 8, Pa.

## CHROMALOX

### DIRECT FACTORY REPRESENTATIVES

- ATLANTA 9, GEORGIA**  
C. B. Rogers and Associates  
1000 Peachtree Street, N.E.—Elgin 1733
- BALA-CYNWYD, PENNSYLVANIA**  
J. V. Calhoun Company, 349 Montgomery Avenue  
Greenwood 3-4477-78-79-80 (Philadelphia Exchange)
- BALTIMORE 18, MARYLAND**  
Paul V. Renoff Company  
333 East 25th Street—Hopkins 7-3280 - 7-3281
- BLOOMFIELD, NEW JERSEY**  
M. B. Rosevear Company, Inc.  
Two Broad Street—Bloomfield 2-8600-8604  
New York City: Worth 4-4258, 4-4278
- BOSTON 11, MASSACHUSETTS**  
Leo C. Pelkus and Company  
683 Atlantic Avenue—Liberty 2-1970 and 2-1946
- BUFFALO 2, NEW YORK**  
Niagara Electric Sales Company  
505 Delaware Avenue—Summer 4000
- CHATTANOOGA 2, TENNESSEE**  
Harold Miles and Associates  
424 Georgia Avenue—Phone 5-3862
- CHARLOTTE 2, NORTH CAROLINA**  
Ranson, Wallace & Co., 115½ East Fourth Street  
Edison 4-4244—Franklin 5-1044
- CHICAGO 6, ILLINOIS**  
Fred I. Tourtelot Co., 407 South Dearborn Street  
Harrison 7-5507, 7-5508, 7-5509
- CINCINNATI 8, OHIO**  
William F. Smyser Company  
1046 Delta Avenue—Trinity 1-0605
- CLEVELAND 13, OHIO**  
Anderson-Bolds, Inc.  
2012 West 25th Street—Prospect 1-7112
- DALLAS 26, TEXAS**  
L. R. Ward Company  
3009-11 Canton Street—Riverside 6279
- DENVER 11, COLORADO**  
Richards & Associates  
2415 15th Street—Glendale 5-3651
- DES MOINES 14, IOWA**  
Midwest Equipment Company of Iowa  
842 Fifth Avenue—Des Moines 3-1203
- DETROIT 28, MICHIGAN**  
Carman Adams, Inc.  
15760 James Couzens Highway—University 3-9100
- HOUSTON 3, TEXAS**  
L. R. Ward Company  
1814 Texas Avenue—Blackstone 0356
- INDIANAPOLIS 4, INDIANA**  
Couchman-Conant, Inc.  
627-631 Architects & Builders Bldg.—Maifrose 5-5313
- KANSAS CITY 6, MISSOURI**  
F. D. Moore Company  
106 East 14th Street—Victor 3306
- LOS ANGELES 11, CALIFORNIA**  
Montgomery Brothers  
2113 South San Pedro Street—Richmond 7-9401
- MIDDLETOWN, CONNECTICUT**  
Dittman and Greer, Inc.  
33 Pleasant Street—Diamond 6-9506
- MILWAUKEE 3, WISCONSIN**  
Gordon Hatch Company  
531 West Wisconsin Avenue—Broadway 1-3021
- MINNEAPOLIS 4, MINNESOTA**  
Voica Company  
831 South Sixth Street—Geneva 3373
- NEW YORK CITY, NEW YORK**  
See Bloomfield, New Jersey
- OMAHA 2, NEBRASKA**  
Midwest Equipment Company of Omaha  
1614 Izard Street—Atlantic 7600-7601
- PHILADELPHIA, PENNSYLVANIA**  
See Bala-Cynwyd, Pa. (Suburb of Philadelphia)
- PITTSBURGH 6, PENNSYLVANIA**  
Wessner-McKnight Co., 1310 Highland Building  
115 South Highland Avenue—Emerson 1-2900
- PORTLAND 8, OREGON**  
Montgomery Brothers  
1632 N.W. Johnson Street—Beacon 4197
- ROCHESTER 4, NEW YORK**  
Niagara Electric Sales Company  
133 South Clinton Avenue—Hamilton 2070
- ST. LOUIS 1, MISSOURI**  
C. B. Fall Company  
317 North 11th Street—Chestnut 1-2433
- SAN FRANCISCO 3, CALIFORNIA**  
Montgomery Brothers  
1122 Howard Street—Underhill 1-3527
- SEATTLE 4, WASHINGTON**  
Montgomery Brothers  
911 Western Avenue—Seneca 3270
- SYRACUSE 5, NEW YORK**  
Rob-Smith Company  
2507 James Street—Syracuse 73-2748
- WICHITA 2, KANSAS**  
F. D. Moore Company, Room 211 Derby Building  
352 North Broadway—Amherst 2-5647
- EXPORT DEPARTMENT**—1010 Schaff Building  
Philadelphia 2, Pennsylvania—Locust 4-4020

**Wagner®**  
ELECTRIC MOTORS  
...the choice of leaders  
in industry



# Wagner Quality Motors

## for your product or your plant

Whatever your motor requirements may be—single-phase or polyphase, 1/125 hp or 500 hp—Wagner can offer a standard motor that is entirely dependable in its specific applications. The variety of motors shown here is typical of the many motors and motor modifications in the complete Wagner line.

At left is TYPE RP—open type polyphase squirrel-cage motor. It is drip-proof and suitable for all general purpose applications. Available in ratings to 500 hp.

### SINGLE-PHASE



TYPE RB—Split-phase Induction. For easy starting applications with high starting current. 1/2 horsepower and smaller.



TYPE RK—Capacitor-start Induction. For general purpose applications. Rigid or resilient mounts in 56 frame. 3/4 horsepower and smaller.



TYPE RK—Capacitor-start Induction. High starting torque—normal starting current. 182-215 frames, rigid or resilient mounts. Integral ratings through 5 hp.



TYPE RA—Repulsion-start Induction. General purpose. High starting torque—low starting current. 1/2 to 15 hp.

### POLYPHASE MOTORS



TYPE DP—Drip-proof plus! Corrosion-resistant cast-iron frames rated to new NEMA Standards. 1 through 30 hp.



TYPE TP—Totally-enclosed, non-ventilated. Fully protected. 1/4 to 15 horsepower.



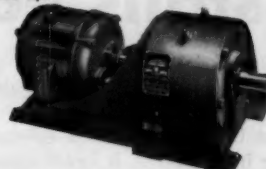
TOTALLY-ENCLOSED FAN-COOLED—Steel or cast iron smooth frames, both standard and explosion proof types. Available in ratings through 250 hp.



TOTALLY-ENCLOSED FAN-COOLED—Cast iron ribbed frames, standard and explosion proof types. Through 10 hp.



TYPE RS-1—Wound Rotor. Constant or adjustable varying speed. 1 to 250 hp. TYPE RS-2 for intermittent service. 2 to 200 hp.



GEAR MOTORS—Single-phase or Polyphase. Open or enclosed types. 1/2 to 50 hp.

\* \* \*

In addition to a complete line of standard motors, Wagner also furnishes Increment Type Motor and Starter Combinations, Jet Pump Motors and Hermetic Type Motors. Wagner engineers welcome an opportunity to serve you. Consult the nearest of our 32 Branch offices, or mail coupon below for full information on the complete Wagner line.



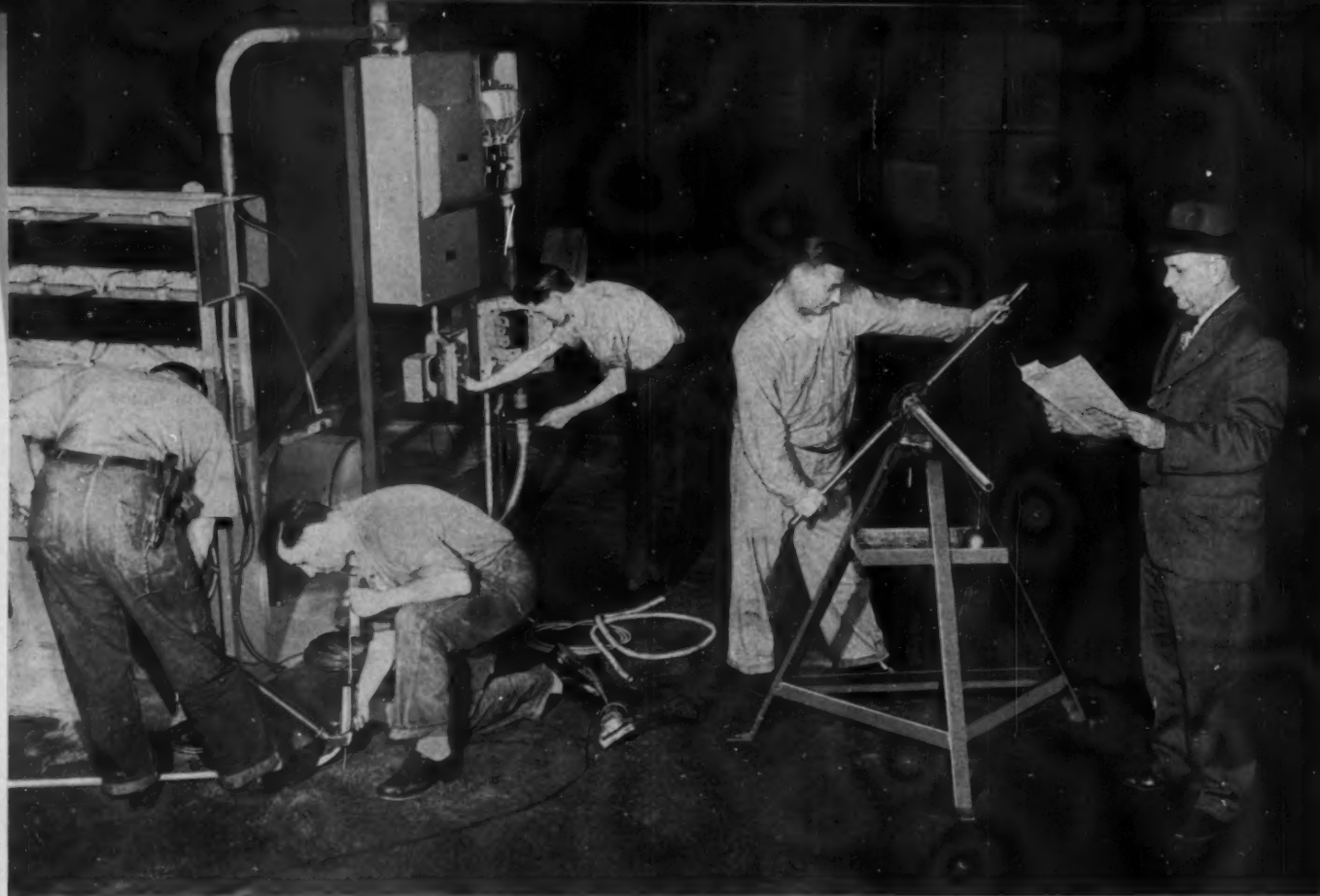
### Wagner Electric Corporation

6413 Plymouth Ave., St. Louis 14, Mo.

Please send Bulletin MU-185 on your complete line of Motors.

NAME \_\_\_\_\_  
POSITION \_\_\_\_\_  
COMPANY \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY & STATE \_\_\_\_\_

M55-19



## They know G-E White rigid conduit installs easily...resists corrosion

Ask the man who installs rigid conduit and you'll learn why he prefers G-E White. Contractors, too, are finding that G-E White adds a substantial efficiency factor to their installations. It bends easier and threads easier than old-style conduit because galvanizing by metallizing eliminates processes which cause most conduit to harden. Wires pull more easily because the new organic coating on the inside contains a special anti-friction compound.

### **... and it offers outstanding corrosion-resistant advantages**

G-E White rigid steel conduit stands up so well against corrosion, it provides assurance that the job you do today is planned for the future as well. G-E White is zinc-galvanized by metallizing, a process which bonds a uni-

form coating of pure zinc to the entire outside surface of the conduit, including threads. The interior surface is protected by a special organic coating. Exacting tests prove that the new G-E White offers improved resistance to corrosion from smoke, heat, humidity, acid fumes, alkalies, and salt atmosphere—both inside and out. The C-553 organic coating over the zinc retards white rust and gives extra protection against rough handling.

G-E White is one of many General Electric products designed to help electrical contractors in meeting the challenge of staying one jump ahead of tomorrow's electrical needs while keeping within today's economic limitations. For more information see your G-E Construction Materials distributor or write Section C55-1318 Construction Materials Division, General Electric Company, Bridgeport 2, Connecticut.

*Progress Is Our Most Important Product*

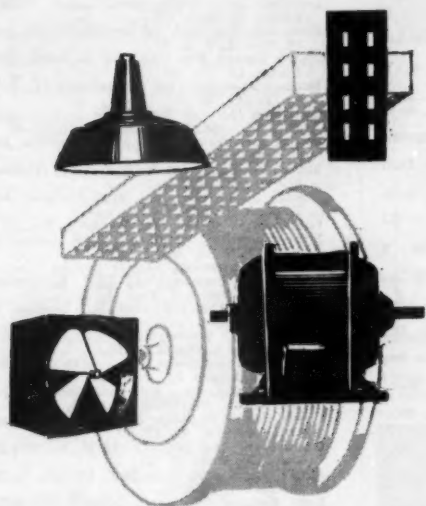
**GENERAL  ELECTRIC**



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# Product Directory

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## Classified listings of manufacturers of electrical products

Product headings in this section are arranged alphabetically according to the basic word identifying the product. For example: "Lighting Fixtures" would be listed as "FIXTURES, Lighting"; "Conduit Fittings" would be listed as "FITTINGS, Conduit".

To eliminate duplication of listings and to facilitate the location of a particular product, certain of the products have been grouped under a collective name common to all in the group. For example: "Frequency Converters", "Phase Converters" and "Synchronous (or Rotary) Converters" are grouped under the common head "CONVERTERS" as follows:

### CONVERTERS

1. Frequency
2. Phase
3. Synchronous (Rotary)

The names and addresses of converter manufacturers are then listed, each being followed by one of more bold-face numbers in parentheses. These numbers indicate which of the three types of converters are made by that particular manufacturer. In this example, the numbers (1, 2) would signify that the manufacturer made both Frequency and Phase Converters.

For those products which may be known to the trade by different names, cross-references direct the user to the headings under which the manufacturers of those products are listed.

The symbol (●) combined with a bold-face company listing indicates that the manufacturer has provided additional product data in the **Manufacturers' Product Data Section** beginning on page 91. Page numbers following these bold-face listings refer to the pages on which this data may be found.

**A**

**ABSORBERS, Misc.**

Fixture Shock—see **HANGERS, Fixture, Shock Absorbing**  
Vibration—see **BASES, Vibration Insulating; DAMPENERS, Transmission Line Vibration**

**ACID, Battery**

Bios Laboratories, Inc., 19 W. 60 St., New York, N. Y.  
Northwoods Mfg. Chemists, Inc., Porterfield, Wis.  
Scranton Battery Corp., Archbald, Pa.  
Stauffer Chemical Co., 380 Madison Ave., New York 17, N. Y.

**ACID, Soldering—see FLUX, Soldering**

**ACORNs, Socket Chain—see CONNECTORS, Ball Chain**

**ADAPTERS**

1. Bayonet Socket
  2. Cable
  3. Conduict
  4. Conduit Bushing
  5. Lamp Shade
  6. Oil Lamp
  7. Plug, American to Continental and English
  8. Screw Socket
  9. Vase-to-Lamp
- Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. (4)  
Arrolet Corp., Foot of Bower St., Montgomery, Pa. (4)  
Arrow-Hart & Hegeman Electric Co., 103 Hawthorn St., Hartford 6, Conn. (8)  
Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (8)  
● **BLACKHAWK INDUSTRIES, 250 S. Main St., Dubuque, Iowa (4)—ADV. PG. 97**  
Bryant Electric Co., Box D Barnum Station, Bridgeport 2, Conn. (1, 3, 7, 8)  
Cable Electric Products, Inc., 234 Daboli St., Providence 7, R. I. (2, 3, 5, 6, 8, 9)  
Cam-Lok Div., Empire Products, Inc., 9051 Blue Ash Rd. (Box 98), Cincinnati 36, Ohio (2)  
Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (6, 8)  
Duro Fittings Co., 2040 Sante Fe Ave., Los Angeles 21, Calif. (4)  
Eagle Electric Mfg. Co., Inc., 23-19 Bridge Plaza South, Long Island City 1, N. Y. (1, 3, 5, 7, 8)  
Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (4)  
General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn. (1)  
General Radio Co., 275 Massachusetts Ave., Cambridge 39, Mass. (2)  
Hubbell Inc., Harvey, State & Bostwick Ave., Bridgeport 2, Conn. (1, 8)  
Joy Mfg. Co., H. W. Oliver Bldg., Pittsburgh 22, Pa. (2, 7)  
Kulka Electric Mfg. Co., Inc., 633 S. Fulton Ave., Mount Vernon, N. Y. (7, 8)  
Leviton Mfg. Co., Inc., 236 Greenpoint Ave., Brooklyn 22, N. Y. (8)  
Metallectrics, Inc., 477 Broadway, N. Y. 12, N. Y. (4)  
Mica Insulator Co., P. O. Box 1076, Schenectady 1, N. Y. (4)  
Midwest Electric Mfg. Co., 1639 Walnut St., Chicago 12, Ill. (4)  
Morse Co., Frank W. 1300 Soldiers Field Rd., Boston 35, Mass. (1, 8)  
North American Electric Lamp Co., 1014 Tyler St., St. Louis 6, Mo. (6)  
Oceanic Electric Products Corp., 187 Water St., New York 38, N. Y. (1, 8)  
Pass & Seymour, Inc., Syracuse 9, N. Y. (8)  
Philadelphia Electrical & Mfg. Co., 1200-36 N. 31 St., Phila. 21, Pa. (8)  
Richards Co., J. R., P. O. Box 482, Carnegie, Pa. (4)  
● **RODALE MFG. CO., INC., 6th & Minor Sts., Emmaus, Pa. (3, 7, 8, 9)—ADV. PG. 143**  
Rohrer, Inc., Wm. G., 159 Liberty Ave., Mineola, N. Y. (4)  
Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)  
Smith-Victor Corp., Griffith, Ind. (1)  
Speaker Corp., J. W., 3059 N. Well St., Milwaukee 12, Wis. (2, 8)  
Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa. (4)  
Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (2, 4)  
Tomic Sales & Engineering Co., 20000 Sherwood Ave., Detroit 34, Mich. (4)  
Verplex Co., 100 Middlesex Turnpike, Essex 1, Conn. (5)  
Wages Mfg. Co., 632 N. Albany Ave., Chicago 12, Ill. (7)  
Woodward Machine Co., Lighting Div., 4833 Elmhurst, Detroit 4, Mich. (4)  
Yorkville Metal Products Co., 677 Broadway, New York 12, N. Y. (3, 9)

● **BLACKHAWK INDUSTRIES, 250 S. Main St., Dubuque, Iowa (4)—ADV. PG. 97**  
Bryant Electric Co., Box D Barnum Station, Bridgeport 2, Conn. (1, 3, 7, 8)  
Cable Electric Products, Inc., 234 Daboli St., Providence 7, R. I. (2, 3, 5, 6, 8, 9)  
Cam-Lok Div., Empire Products, Inc., 9051 Blue Ash Rd. (Box 98), Cincinnati 36, Ohio (2)  
Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (6, 8)  
Duro Fittings Co., 2040 Sante Fe Ave., Los Angeles 21, Calif. (4)  
Eagle Electric Mfg. Co., Inc., 23-19 Bridge Plaza South, Long Island City 1, N. Y. (1, 3, 5, 7, 8)  
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Kulka Electric Mfg. Co., Inc., 633 S. Fulton Ave., Mount Vernon, N. Y. (7, 8)  
Leviton Mfg. Co., Inc., 236 Greenpoint Ave., Brooklyn 22, N. Y. (8)  
Metallectrics, Inc., 477 Broadway, N. Y. 12, N. Y. (4)  
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Midwest Electric Mfg. Co., 1639 Walnut St., Chicago 12, Ill. (4)  
Morse Co., Frank W. 1300 Soldiers Field Rd., Boston 35, Mass. (1, 8)  
North American Electric Lamp Co., 1014 Tyler St., St. Louis 6, Mo. (6)  
Oceanic Electric Products Corp., 187 Water St., New York 38, N. Y. (1, 8)  
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Rohrer, Inc., Wm. G., 159 Liberty Ave., Mineola, N. Y. (4)  
Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)  
Smith-Victor Corp., Griffith, Ind. (1)  
Speaker Corp., J. W., 3059 N. Well St., Milwaukee 12, Wis. (2, 8)  
Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa. (4)  
Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (2, 4)  
Tomic Sales & Engineering Co., 20000 Sherwood Ave., Detroit 34, Mich. (4)  
Verplex Co., 100 Middlesex Turnpike, Essex 1, Conn. (5)  
Wages Mfg. Co., 632 N. Albany Ave., Chicago 12, Ill. (7)  
Woodward Machine Co., Lighting Div., 4833 Elmhurst, Detroit 4, Mich. (4)  
Yorkville Metal Products Co., 677 Broadway, New York 12, N. Y. (3, 9)

**ADAPTERS, Misc.**

Bolt Clevis—see **FITTINGS, Insulator**  
Fuse—see **REDUCERS, Fuse**  
Insulator Thimble—see **PINS, Insulator, Metal**  
Pin Hole—see **WASHERS, Centering**

**ADJUSTERS, Cord**

Cordomatic Div., Vacuum Cleaner Corp. of America, 1724 W. Indiana Ave., Phila. 32, Pa.  
Hubbell Inc., Harvey, State & Bostwick Ave., Bridgeport 2, Conn.

**AIR CIRCULATORS—see FANS, Circulating**

**AIR CONDITIONERS, Commercial**

1. Central Unit
  2. Central Unit, Combined with Heater
  3. Console
  4. Console, with Heating Element
- Acme Industries, Inc., 620 N. Mechanic St., Jackson, Mich. (1)  
Air & Refrigeration Corp., 439 Madison Ave., New York City, N. Y. (1, 2)  
Airtemp Div., Chrysler Corp., 1600 Webster St., Dayton 1, Ohio  
American Blower Corp., Detroit 32, Mich. (1)  
American Coils Co., 360 Thomas St., Newark 5, N. J. (1, 2)  
Barkow Mfg. Co., Inc., Aug. G., 2230 S. 43 St., Milwaukee 15, Wis. (1)  
Brunner Mfg. Co., 1821 Broad St., Utica, N. Y. (1, 3)  
Burnham Corp., Box 351, Zanesville, Ohio (1, 3, 4)  
Carrier Corp., 300 S. Geddes St., Syracuse 1, N. Y. (1, 2, 3, 4)  
Cool-ette, Inc., 20080 James Couzens Highway, Detroit 35, Mich. (1, 3)  
Curtis Mfg. Co., Curtis Refrigeration Div., St. Louis 20, Mo. (1, 2, 3, 4)  
Dunham Co., C. A., 400 W. Madison St., Chicago 6, Ill. (4)  
Forston Co., 1400 Conti St., Houston 2, Tex. (1)  
Frick Co., Waynesboro, Pa. (1, 2, 3, 4)  
General Electric Co., Air Conditioning Div., 5 Lawrence St., Bloomfield, N. J. (3, 4)  
Globe Stamping Div., Hupp Corp., 1250 W. 76 St., Cleveland 2, Ohio (3)  
Haertel Co., Walter, 2840 4th Ave. So., Minneapolis, Minn. (1)  
Jordan Refrigerator Co., Inc., 7900 Tabor Rd., Phila. 11, Pa. (3)  
Kaufman Air Conditioning Co., 4505 Olive St., St. Louis, Mo. (1, 2, 3, 4)  
King Refrigerator Corp., 76-02 Woodhaven Blvd., Glendale 27, N. Y. (1)  
Lennox Furnace Co., Marshalltown, Iowa (1, 2)  
Mario Coll Co., 6135 Manchester Ave., St. Louis 10, Mo. (2, 3, 4)  
Mitchell Mfg. Co., 2525 Cloyburn Ave., Chicago 14, Ill. (1)  
Motor Specialty, Inc., 1331 18th St., Racine, Wis. (3)  
Quiet-Heat Mfg. Corp., 46 Oliver St., Newark 5, N. J. (1, 2)  
Remington Corp., Remington Air Conditioning Div., Willey St., Auburn, N. Y. (3, 4)  
Sutton Corp., O. A., 1812 W. Second, Wichita, Kans. (1)  
Trane Co., La Crosse, Wis. (1, 2, 3, 4)  
Typhoon Air Conditioning Co., Inc., 505 Carroll St., Brooklyn 15, N. Y. (1, 2)  
Union Asbestos & Rubber Co., 332 S. Michigan Ave., Chicago 4, Ill. (1, 3)  
United States Air Conditioning Corp., Como Ave. S. E. at 33rd, Minneapolis 14, Minn. (1, 2)  
Westinghouse Electric Corp., Sturtevant Div., Damon St., Hyde Park, Boston 36, Mass. (1)  
Worthington Corp., Worthington Ave., Harrison, N. J. (1, 2, 3, 4)

**AIR CONDITIONERS, Industrial**

Acme Industries, Inc., 620 N. Mechanic St., Jackson, Mich.  
Air & Refrigeration Corp., 439 Madison Ave., New York City, N. Y.  
Airtemp Div., Chrysler Corp., 1600 Webster St., Dayton 1, Ohio  
American Blower Corp., Detroit 32, Mich.  
Buffalo Forge Co., 490 Broadway, Buffalo 5, N. Y.  
Carrier Corp., 300 S. Geddes St., Syracuse 1, N. Y.  
Curtis Mfg. Co., Curtis Refrigeration Div., St. Louis 20, Mo.  
Frick Co., Waynesboro, Pa.  
Frigidaire Div., General Motors Corp., 300 Taylor St., Dayton 1, Ohio  
General Electric Co., Air Conditioning Div., 5 Lawrence St., Bloomfield, N. J.  
Haertel Co., Walter, 2840 4th Ave. So., Minneapolis, Minn.  
Kaufman Air Conditioning Co., 4505 Olive St., St. Louis, Mo.  
Lennox Furnace Co., Marshalltown, Iowa  
Linterm Corp., Route 20 East, Painesville, Ohio  
Mario Coll Co., 6135 Manchester Ave., St. Louis 10, Mo.  
Remington Corp., Remington Air Conditioning Div., Willey St., Auburn, N. Y.  
Trane Co., La Crosse, Wis.  
Union Asbestos & Rubber Co., 332 S. Michigan Ave., Chicago 4, Ill.  
United States Air Conditioning Corp., Como Ave. S. E. at 33rd, Minneapolis 14, Minn.  
Westinghouse Electric Corp., Sturtevant Div., Damon St., Hyde Park, Boston 36, Mass.  
Worthington Corp., Worthington Ave., Harrison, N. J.

**AIR CONDITIONERS, Residential**

1. Central Unit
2. Central Unit, Combined with Heater
3. Room Console
4. Room Console, with Heating Element
5. Window
6. Window, with Heating Element

Acme Industries, Inc., 620 N. Mechanic St., Jackson, Mich. (1)  
Active Specialty Corp., 302 N. Water St., Newburgh, N. Y. (5)  
Air & Refrigeration Corp., 439 Madison Ave., New York City, N. Y. (1, 2)  
Airtemp Div., Chrysler Corp., 1600 Webster St., Dayton 1, Ohio (1, 2, 5, 6)  
American Coils Co., 360 Thomas St., Newark 5, N. J. (1, 2)  
Barkow Mfg. Co., Inc., Aug. G., 2230 S. 43 St., Milwaukee 15, Wis. (1)  
Brunner Mfg. Co., 1821 Broad St., Utica, N. Y. (1, 3)  
Burnham Corp., Box 351, Zanesville, Ohio (1, 3, 4, 5, 6)  
Carrier Corp., 300 S. Geddes St., Syracuse 1, N. Y. (1, 2, 3, 4, 5, 6)  
Circle Air Products, Inc., 244 Herkimer St., Brooklyn 16, N. Y. (3)  
Conco Engineering Works, Mendota, Ill. (1, 2)  
Cool-ette, Inc., 20080 James Couzens Highway, Detroit 35, Mich. (1)  
Curtis Mfg. Co., Curtis Refrigeration Div., St. Louis 20, Mo. (1, 2, 3, 4)  
Dayton Electric Mfg. Co., 126 S. Oakley Blvd., Chicago 12, Ill. (6)  
Dearborn Stove Co., 1700 W. Commerce St., Dallas 2, Tex. (5, 6)  
Deepfreeze Appliance Div., Motor Products Corp., 2301 Davis St., North Chicago, Ill. (5, 6)  
Deering Air Conditioning Co., 1069 Celestial Ave., Cincinnati 2, Ohio (1, 2, 5)  
Dunham Co., C. A., 400 W. Madison St., Chicago 6, Ill. (4)  
Emerson Electric Mfg. Co., 8100 Florissant Ave., St. Louis 21, Mo. (5)  
Forston Co., 1400 Conti St., Houston 2, Tex. (1, 5)  
Fresh'n-Aire Div., Corp Corp., 221 N. LaSalle St., Chicago, Ill. (5, 6)  
Frick Co., Waynesboro, Pa. (1)  
Friedrich Refrigerators, Inc., 1117 E. Commerce St., San Antonio 3, Tex. (1, 5)  
Frigid, Inc., 1228-168 32nd St., Brooklyn 32, N. Y. (5, 6)  
Frigidaire Div., General Motors Corp., 300 Taylor St., Dayton 1, Ohio (1, 2, 5)  
General Air Conditioning Corp., 4542 E. Dunham St., Los Angeles 23, Calif. (1)  
General Electric Co., Air Conditioning Div., 5 Lawrence St., Bloomfield, N. J. (3, 4)  
General Electric Co., Major Appliance Div., Appliance Park, Louisville, Ky. (5, 6)  
Gibson Refrigerator Co., 515-615 W. Williams St., Greenville, Mich. (5, 6)  
Globe Stamping Div., Hupp Corp., 1250 W. 76 St., Cleveland 2, Ohio (1)  
Great Northern Mfg. Corp., 1056 N. Wood St., Chicago 22, Ill. (5, 6)  
Heil Co., 3000 W. Montana St., Milwaukee 1, Wis. (1, 2)  
Hotpoint Co., 5600 W. Taylor St., Chicago 44, Ill. (5, 6)  
Hunter Fan & Ventilating Co., 400 S. Front St., Memphis, Tenn. (5)  
International Oil Burner Co., Fan Div., 3800 Park Ave., St. Louis 10, Mo. (2)  
Iron Fireman Mfg. Co., 3170 W. 106 St., Cleveland 11, Ohio (1, 2, 5, 6)  
Jordan Refrigerator Co., Inc., 7900 Tabor Rd., Phila. 11, Pa. (3)  
Kaufman Air Conditioning Co., 4505 Olive St., St. Louis, Mo. (1, 2, 3, 4, 5, 6)  
King Refrigerator Corp., 76-02 Woodhaven Blvd., Glendale 27, N. Y. (5, 6)  
Lennox Furnace Co., Marshalltown, Iowa (1, 2)  
Mitchell Mfg. Co., 2525 Cloyburn Ave., Chicago 14, Ill. (1, 2, 5, 6)  
National Steel Construction Co., Inc., 301 Water St., Loganport, Ind. (5, 6)  
Perfection Industries, Inc., 7609 Platt Ave., Cleveland 4, Ohio (1, 5, 6)  
Quiet-Heat Mfg. Corp., 46 Oliver St., Newark 5, N. J. (1, 5, 6)  
Remington Corp., Remington Air Conditioning Div., Willey St., Auburn, N. Y. (1, 3, 4, 5, 6)  
Robbins & Myers, Inc., Fan Div., 367 S. Front St., Memphis, Tenn. (5)  
Sutton Corp., O. A., 1812 W. Second, Wichita, Kans. (1, 5, 6)  
Typhoon Air Conditioning Co., Inc., 505 Carroll St., Brooklyn 15, N. Y. (1, 2)  
Union Asbestos & Rubber Co., 332 S. Michigan Ave., Chicago 4, Ill. (1, 3)  
United States Air Conditioning Corp., Como Ave. S. E. at 33rd, Minneapolis 14, Minn. (1, 2, 5, 6)  
Victor Products Corp., 901 Pope Ave., Hagerstown, Md. (5)  
Webb Stove Co., Inc., 57-18 Flushing Ave., Maspeth 78, L. I., N. Y. (5, 6)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 5)  
Westinghouse Electric Corp., Electric Appliance Div., 653 Page Blvd., Springfield 2, Mass. (5, 6)  
Westinghouse Electric Corp., Electric Appliance Div., 246 E. Fourth St., Mansfield, Ohio (5, 6)  
Worthington Corp., Worthington Ave., Harrison, N. J. (1, 2, 3, 4, 5)

**ALARMS**

1. Bearing Temperature
2. Current Failure
3. Freezer
4. Liquid Flow
5. Low Oil Level
6. Low Water Level
7. Peak Load
8. Power Factor
9. Smoke

**10. Speed Governing**  
**11. Tank**  
**12. Temperature**  
**13. Transformer Oil Level**

Acme Fire Alarm Company, Inc., 106 Seventh Ave., New York 13, N. Y. (6, 11)  
 Afco Lite Corp., 1234 N. Paulina St., Chicago 22, Ill. (2)  
 Alserco Mfg. Co., Inc., 435 Melwood St., Pittsburgh 13, Pa. (12)  
 American District Telegraph Co., 155 Sixth Ave., New York 13, N. Y. (2, 6, 9, 11, 12)  
 Assembly Products, Inc., Chesterland 1, Ohio (1, 2, 4, 7, 10, 12)  
 Automatic Control Co., 995 University Ave., St. Paul 4, Minn. (2, 4, 5, 6, 11)  
 B/W Controller Corp., 2200 E. Maple Rd., Birmingham, Mich. (6)  
 Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland 10, Ohio (4, 5, 6, 9, 12)  
 Bourns Laboratories, Instrument Sales Corp., 6135 Magnolia Ave., Riverside, Calif. (4, 5, 6, 13)  
 Bristol Co., Waterbury 20, Conn. (2, 4, 5, 6, 7, 8, 9, 10, 12, 13)  
 Cooper Co., Inc., Clark, 317 N. Market St., Palmyra, N. J. (1, 12)  
 Cooper Hewitt Electric Co., 720-732 Grand St., Hoboken, N. J. (3)  
 Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (1, 2, 3, 4, 5, 6, 7, 12)  
 Edwards Co., Inc., Norwalk, Conn. (3, 5, 12)  
 Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa. (5, 6)  
 Electro Devices, Inc., 4025 Easton Ave., St. Louis 13, Mo. (2)  
 Electronic Control Corp., 1573 E. Forest Ave., Detroit 7, Mich. (9)  
 Electronics Corp. of America, 77 Broadway, Cambridge 42, Mass. (6, 9)  
 Emmett Machine & Mfg., Inc., 445 E. Turkeyfoot Lake Rd., Akron 19, Ohio (9)  
 Est Instrument Co., 96 S. Washington Ave., Bergenfield, N. J. (9)  
 Ferrara, Inc., 8106 W. Nine Miles Rd., Oak Park 37, Mich. (6)  
 Fielden Instrument Div., Robertshaw-Fulton Controls Co., 2920 N. Fourth St., Phila. 33, Pa. (1, 5, 6, 10, 11, 12)  
 Fischer & Porter Co., 335 Warminster Rd., Hatboro, Pa. (4, 5, 6, 11, 12)  
 General Products Corp., 107 Salem St., Union Springs, N. Y. (2)  
 H-B Instrument Co., American & Bristol Sts., Philadelphia 40, Pa. (12)  
 Hays Mfg. Co., Industrial Sales Div., 12th and Liberty Sts., Erie 6, Pa. (4)  
 Henschel Corp., 14 Cedar St., Amesbury, Mass. (2, 5, 6)  
 Hose-McCann Telephone Co., Inc., 25th St. & 3rd Ave., Brooklyn 32, N. Y.  
 Inferno Co., 115 Ricou St., Shreveport, La. (6)  
 Illinois Testing Laboratories, Inc., 420 N. LaSalle St., Chicago 10, Ill. (1, 12)  
 Kidde & Co., Inc., Walter, 559 Main St., Belleville 9, N. J. (9)  
 Larson Instrument Co., 24 Orchard St., Tarrytown, N. Y. (12)  
 Lord-Taber Co., Inc., 40 Ontario St., Canadaigua, N. Y. (12)  
 Lyon Rural Electric Co., 2075 Moore St., San Diego 12, Calif. (2, 12)  
 McDonnell Miller Inc., 3500 N. Spaulding Ave., Chicago 18, Ill. (4, 5, 6)  
 National Time & Signal Corp., 21800 Wyoming Ave., Detroit 37, Mich. (1, 2)  
 Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla. (1, 2, 4, 5, 6, 7, 10)  
 Panalarm Div., Panelite, Inc., 7401 N. Hamlin Ave., Skokie, Ill. (1, 2, 4, 5, 6, 7, 8, 11, 12)  
 Penn Industrial Instrument Div., Burgess Manning Co., 4110 Haverford Ave., Phila. 4, Pa. (4)  
 Photobell Co., 4 Vesey St., New York 7, N. Y. (9)  
 Plating Processes Co., 109 Lyman St., Holyoke, Mass. (6, 11, 12)  
 Precision Thermometer & Instrument Co., 1434 Brandwine St., Philadelphia 30, Pa. (12)  
 Ripley Co., Inc., Factory St., Middletown, Conn. (4, 9)

● **RUSSELL & STOLL CO., INC.**, 125 Barclay St., New York 7, N. Y. (2, 4, 5, 6, 8, 11, 12, 13)  
 —ADV. PG. THIRD COVER  
 Scam Instrument Corp., 3909 Irving Park Rd., Chicago 19, Ill. (1, 4, 5, 6, 11, 12)  
 Sperti Faraday, Inc., 1322 E. Church St., Adrian, Mich. (3)  
 Sticht Co., Inc., Herman H., 27 Park Place, New York 7, N. Y. (10)  
 Techniflex Corp., 55 Jersey Ave., Port Jervis, N. Y. (5, 6, 11, 13)  
 U. S. Gauge Div., American Machine & Metals, Inc., Clymer Ave., Sellersville, Pa. (12, 13)  
 Viking Instruments, Inc., East Haddam, Conn. (1, 4, 5, 6, 12)  
 Warrick Co., Chas. F., 1964 W. Eleven Mile Rd., Berkeley, Mich. (4, 6)  
 West Instrument Corp., 525 N. Noble St., Chicago 22, Ill. (12)  
 Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark 5, N. J. (12)  
 Worner Electronic Devices, Rankin, Ill. (9)

**ALARMS, Burglar and Intrusion**

1. Automatic
2. Door
3. Electronic
4. Fence and Boundary
5. Manual
6. Vehicle

# Interior Fire Alarm Systems

**coded and non-code types**

**Complete reliability** is the one thing we demand from a fire alarm system. Therefore, when ordering Interior Fire Alarm Systems, be sure to specify equipment (control panels, stations, and fire alarm bells) produced by Signal Engineering & Manufacturing Co., the originators of A-C Fire Alarm Systems.

Both coded and non-code types are available in various arrangements depending on type of building or establishment. Although Interior Fire Alarm Systems are intended primarily for warning occupants of a building, they can be connected into a municipal system.

Engineering representatives in principal cities are available to assist in specifications.

Write for Bulletin FA-3

**FIRE ALARM**

**SIGNAL**

ENGINEERING & MFG. CO.

(INCORPORATED NEW JERSEY)

American District Telegraph Co., 155 Sixth Ave., New York 13, N. Y. (1, 2, 3, 4)  
 Auth Electric Co., Inc., 34-20 45th St., L. I. C. 1, N. Y. (2)  
 Automatic Control Co., 995 University Ave., St. Paul 4, Minn. (1)  
 Babaco Alarm Systems, Inc., 723 Washington St., New York 14, N. Y. (6)  
 Coil Co. of America, Inc., 8 Washington St., Northvale, N. J. (2)  
 Connecticut Telephone & Electric Corp., 70 Britannia St., Meriden, Conn. (1, 3)  
 Edwards Co., Inc., Norwalk, Conn. (1, 2)  
 El-Tronics, Inc., 437 N. Fifth St., Phila. 23, Pa. (1, 3)  
 Electra Protection Co., Inc., 127 N. Lake Ave., Albany 6, N. Y. (1, 3)  
 Electronic Control Corp., 1573 E. Forest Ave., Detroit 7, Mich. (3)  
 Electronics Corp. of America, 77 Broadway, Cambridge 42, Mass. (1, 2, 3, 4)  
 Ideal Alarm and Signal Co., 204 Franklin St. (Box 255), Danville, Ill. (1, 2, 4, 6)  
 Langevin Mfg. Corp., 37 W. 65 St., N. Y. 23, N. Y. (3)  
 Lint, Clyde W., 2323 W. 18 St., Chicago 8, Ill. (1, 5)  
 Lyon Rural Electric Co., 2075 Moore St., San Diego 12, Calif. (5)  
 McClintock Div., O. B., Diebold Inc., Canton 2, Ohio (1, 3, 5)  
 Partrick & Wilkins Co., 51 N. Seventh St., Phila. 6, Pa. (1, 2, 5)  
 Photobell Co., 43 Vesey St., New York 7, N. Y. (1, 2, 3, 4)  
 Protection Equipment Co., Inc., 2924 Emerson Ave., S. (P. O. Box 96, Lake St. Branch), Minneapolis 8, Minn. (1, 3)  
 Ripley Co., Inc., Factory St., Middletown, Conn. (3)  
 Sperti Faraday, Inc., 1322 E. Church St., Adrian, Mich. (1, 2, 3)  
 Spies Electric Works, 564 W. Van Buren St., Chicago 7, Ill. (1, 2)  
 Worner Electronic Devices, Rankin, Ill. (3)

**ALARMS, Fire**

1. Automatic
2. Manual

Acme Fire Alarm Company, Inc., 106 Seventh Ave., New York 11, N. Y. (1, 2)  
 American District Telegraph Co., 155 Sixth Ave., New York 13, N. Y. (1, 2)  
 Assembly Products, Inc., Chesterland 31, Ohio (1)  
 Auth Electric Co., Inc., 34-20 45th St., L. I. C. 1, N. Y. (1, 2)  
 Autocal Co., Shelby, Ohio (1, 2)  
 AutoFRTstop Co., 2035 Washington Ave., Phila. 46, Pa. (1)  
 Automatic Control Co., 995 University Ave., St. Paul 4, Minn. (1)

Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (1, 2)  
 Connecticut Telephone & Electric Corp., 70 Britannia St., Meriden, Conn. (1)  
 Cooper Hewitt Electric Co., 720-732 Grand St., Hoboken, N. J. (1, 2)  
 Couch Co., Inc., S. H., 3 Arlington St., North Quincy 71, Mass. (1, 2)  
 Edwards Co., Inc., Norwalk, Conn. (1, 2)  
 Electra Protection Co., Inc., 127 N. Lake Ave., Albany 6, N. Y. (1, 2)  
 Electronics Corp. of America, 77 Broadway, Cambridge 42, Mass. (1)  
 Federal Sign & Signal Corp., 8726 S. State St., Chicago 19, Ill. (2)  
 Gamewell Co., 1238 Chestnut St., Newton Upper Falls 64, Mass. (1, 2)  
 Henschel Corp., 14 Cedar St., Amesbury, Mass. (1)  
 Ideal Alarm and Signal Co., 204 Franklin St. (Box 255), Danville, Ill. (1, 2)  
 International Business Machines Corp., 590 Madison Ave., N. Y. 22, N. Y. (1, 2)  
 Kidde & Co., Inc., Walter, 459 Main St., Belleville 9, N. J. (1)  
 Ligalarms, Inc., 95 Atlantic Ave., Brooklyn 1, N. Y. (1)  
 Lord-Taber Co., Inc., 40 Ontario St., Canadaigua, N. Y. (1, 2)  
 Lyon Rural Electric Co., 2075 Moore St., San Diego 12, Calif. (1)  
 Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn. (1)  
 New Jersey Fire Alarm Co., 37 S. 8th St., Newark 7, N. J. (1, 2)  
 Partrick & Wilkins Co., 51 N. Seventh St., Phila. 6, Pa. (1, 2)  
 Products Specialties, Inc., 1016 N. Avenue E., Cranford, N. J. (1)  
 Protectowire Co., P. O. Box 0, Hanover, Mass. (1)  
 Reiter Corp., 1917 Henry Ave., S. W. (P. O. Box 408), Canton 1, Ohio (2)  
 SAFA Alarm Div., Fyr-Fyter Co., 243 W. Market St., Orrville, Ohio (2)  
 Signal Engineering & Mfg. Co., Branchport Ave., Long Branch, N. J. (1, 2)  
 Sperti Faraday, Inc., 1322 E. Church St., Adrian, Mich. (1, 2)  
 Standard Electric Time Co., 129 Logan St., Springfield, Mass. (1, 2)

**ALLOYS, Fusible**

Belmont Smelting & Refining Works, Inc., 330 Belmont Ave., Brooklyn 7, N. Y.  
 Chas. Brass & Copper Co., Inc., 236 Grand St., Waterbury 20, Conn.  
 Division Lead Co., 7742 W. 61st Place, Summit, Ill.  
 Federated Metals Div., American Smelting & Refining Co., 120 Broadway, New York 5, N. Y.  
 National Lead Co., 111 Broadway, N. Y. 6, N. Y.



# Testing Instruments



The new Types AK-4 and AK-5 hook-on volt-ammeters are the first to feature automatic scale changing. You see only the scale you select on the range selector switch. Other features include a wide range of seven scales to cover almost all of your testing and maintenance requirements. The wider range AK-4 model has a pointer-stop to check surge readings. Engineers, contractors, electricians, maintenance and service men will find these new G-E hook-ons ideal for balancing circuits, estimating new or revised distribution circuits, tracing faults and grounds, or diagnosing operating troubles without equipment shutdowns.

Consult classified section of phone book for address of nearest G-E Apparatus Agent-Distributor, or write direct to General Electric Co., Section 6-40-396Y, Schenectady 5, N. Y.

**GENERAL ELECTRIC**

## ALUMINUM, Sheet, Rod and Tube

Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa.  
American Nickeloid Co., Peru, Ill.  
Harvey Aluminum, 19200 S. Western Ave., Torrance, Calif.  
Kaiser Aluminum & Chemical Sales, Inc., 919 N. Michigan Ave., Chicago 11, Ill.  
Linde Air Products Co., 30 E. 42 St., N. Y. 17, N. Y.  
Precision Tube Co., Inc., Church Rd. & Wissahickon Ave., North Wales, Pa.  
Revere Copper & Brass Inc., 230 Park Ave., N. Y. 17, N. Y.  
Reynolds Metals Co., 2500 S. 3rd St., Louisville 1, Ky.  
United Wire & Supply Corp., 1497 Elmwood Ave., Providence 7, R. I.  
White Metal Rolling & Stamping Corp., 89 Moutrie St., Brooklyn 22, N. Y.

**ALIGNERS, Fixture—see HANGERS, Fixture, Ball Joint**

**ALTERNATORS—see GENERATORS**

## AMMETERS

1. **Clamp-On**
2. **Panel**
3. **Pocket**
4. **Portable**
5. **Recording**
6. **Switchboard**
7. **Telemetric**

Assembly Products, Inc., Chesterland 31, Ohio (2, 4)  
Blaco Mfg. Co., 6541 Euclid Ave., Cleveland 3, Ohio (2)  
Bristol Co., Waterbury 20, Conn. (4, 5, 6)  
Burlington Instrument Co., Burlington, Iowa (2, 4)  
Burlington Instrument Co., 42 Carleton St., Cambridge 42, Mass. (2, 4, 6)  
Columbia Electric Mfg. Co., 4519 Hamilton Ave., Cleveland 14, Ohio (1)  
Electro-Mechanical Instrument Co., 812 Chestnut St., Perkasie, Pa. (2, 3)  
Esterline-Angus Co., Inc., P. O. Box 596, Indianapolis 6, Ind. (5)  
Ferranti Electric Inc., 30 Rockefeller Plaza, N. Y. 20, N. Y. (1)  
Fielden Instrument Div., Robertshaw-Fulton Controls Co., 2920 N. Fourth St., Phila. 33, Pa. (3)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 3, 4, 5, 6, 7)  
Hewlett-Packard Co., 395 Page Mill Rd., Palo Alto, Calif. (4)  
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland 8, Ohio (1, 2, 3, 4, 6)

International Instruments, Inc., P. O. Box 2954, New Haven 15, Conn. (2)  
Marion Electrical Instrument Co., 400 Canal St., Manchester, N. H. (2)  
Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio (1)  
Meters, Inc., 5353 N. Keystone Ave., Indianapolis 20, Ind. (2)  
Norton Electrical Instrument Co., 71 Hilliard St., Manchester, Conn. (4, 6)  
Pyramid Instrument Corp., 630 Merrick Rd., Lynbrook, N. Y. (1, 3)  
Rawson Electrical Instrument Co., 124 Potter St., Cambridge 42, Mass. (4)  
Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa. (2, 4, 6)  
Sangamo Electric Co., 11th & Converse, Springfield, Ill. (5, 6)  
Sensitive Research Instrument Corp., 9 Elm Ave., Mount Vernon, N. Y. (2, 4)  
Simpson Electric Co., 5200 W. Kinzie St., Chicago 44, Ill. (2)  
Sticht Co., Inc., Herman H., 27 Park Place, New York 7, N. Y. (1, 4)  
Technology Instrument Corp., 531 Main St., Acton, Mass. (4)  
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio (2, 4, 6)  
U. S. Gauge Div., American Machine & Metals, Inc., Clymer Ave., Sellersville, Pa. (2)  
Wallace & Tiernan Inc., 25 Main St., Belleville, N. J. (5)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (2, 4, 5, 6)  
Weston Electrical Instrument Corp., 614 Freylinghuyzen Ave., Newark 5, N. J. (1, 2, 3, 4, 5, 6)

## AMPLIFIERS

1. **Communication**
2. **Control**
3. **Servo**

Adcrafters Co., 325 W. Huron St., Chicago 10, Ill. (1)  
American Electronics, Inc., 4811 Telegraph Rd., Los Angeles 22, Calif. (3)  
Automatic Temperature Control Co., Inc., 5212 Pulaski Ave., Phila. 44, Pa. (3)  
Beck Co., Harold, 3640 N. Second St., Philadelphia 40, Pa. (2, 3)  
Bilas Electronic Corp., Sussex, N. J. (1)  
Bogen Co., Inc., David, 29 Ninth Ave., N. Y. 14, N. Y. (1)  
Bogue Electric Mfg. Co., 52 Iowa Ave., Paterson 3, N. J. (2, 3)  
Bristol Co., Waterbury 20, Conn. (2, 3)  
Centralab Div., Globe-Union Inc., 900 E. Keefe Ave., Milwaukee 1, Wis. (1)  
Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (2, 3)  
Connecticut Telephone & Electric Corp., 70 Britannia St., Meriden, Conn. (1, 2)  
Consolidated Engineering Corp., 300 N. Sierra Madre Villa, Pasadena 15, Calif. (2)  
Doelcam Div., Minneapolis-Honeywell Regulator Co., 1400 Soldiers Field Rd., Boston 35, Mass. (2, 3)  
Du Kane Corp., 200 N. 11 St., St. Charles, Ill. (1)  
El-Tronics, Inc., 437 N. Fifth St., Phila. 23, Pa. (1, 2, 3)  
Electro-Voice Inc., 404 Carroll St., Buchanan, Mich. (1)  
Executone, Inc., 415 Lexington Ave., N. Y. 17, N. Y. (1)  
Federal Telephone and Radio Co., 100 Kingsland Rd., Clifton, N. J. (1, 2, 3)  
Fielden Instrument Div., Robertshaw-Fulton Controls Co., 2920 N. Fourth St., Phila. 33, Pa. (3)  
Henschel Corp., 14 Cedar St., Amesbury, Mass. (3)  
Hewlett-Packard Co., 395 Page Mill Rd., Palo Alto, Calif. (2)  
Jerrold Electronics Corp., 26th & Dickinson Sts., Phila. 46, Pa. (1)  
Langevin Mfg. Corp., 37 W. 65th St., N. Y. 23, N. Y. (1, 2)  
Librascope, Inc., 808 Western Ave., Glendale 1, Calif. (3)  
Loge Sound Engineers, J. M., 2171 W. Washington Blvd., Los Angeles 18, Calif. (1)  
Magnetics, Inc., Box EP6, Butler, Pa. (3)  
Manning, Maxwell & Moore, Inc., 250 E. Main St., Stratford, Conn. (2)  
Melody Master Mfg. Co., 2842 N. Cicero Ave., Chicago 41, Ill. (1)  
Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn. (2, 3)  
Motorola Communications & Electronics, Inc., 4501 W. Augusta Blvd., Chicago 51, Ill. (1)  
National Inter-Communicating Systems, Inc., 1130 N. Milwaukee Ave., Chicago 22, Ill. (1)  
Newcomb Audio Products Co., 6824 Lexington Ave., Hollywood 38, Calif. (1)  
Perkin Engineering Corp., 345 Kansas St., El Segundo, California (2)  
Peschel Electronics, Inc., 13 Garden St., New Rochelle, N. Y. (2)  
Radio Corp. of America, Engineering Products Div., Front & Cooper Sts., Camden 2, N. J. (1)  
Rauland-Borg Corp., 3515 W. Addison St., Chicago 18, Ill. (1)  
Raytheon Mfg. Co., Waltham 54, Mass. (3)  
Regulator Equipment Corp., 56 California Ave., Paterson 3, N. J. (2, 3)  
Sanborn Co., 195 Massachusetts Ave., Cambridge, Mass. (3)  
Scott, Inc., Hermon Hosmer, 385 Putnam Ave., Cambridge 39, Mass. (1, 2)  
Seaboard Electric Co., 417 Canal St., New York 13, N. Y. (3)

# ANCHORING and DRILLING DEVICES



ARROFLUTE Carbide Masonry Drill



Machine Screw Expansion Anchors



Two Wing Spring Type Toggle Bolt

A complete line of Expansion Anchors, Masonry Drills, and Toggle Bolts for every need . . . always specify ARRO

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Simpson Mfg. Co., Inc., Mark, 32-28 49th St., Long Island City 3, N. Y. (1)  
Special Products Co., P. O. Box 188, Rockville 2, Md. (1)  
Standard Electronic Corp., 285 Emmet St., Newark 5, N. J. (1)  
Technology Instrument Corp., 531 Main St., Acton, Mass. (1, 2)  
Telectro Industries Corp., 35-16 37th St., Long Island City 1, N. Y. (1, 2, 3)  
Vickers Electric Div., Vickers, Inc., 1847 Locust St., St. Louis 3, Mo. (2, 3)  
Worner Electronic Devices, Rankin, Ill. (2)

**AMPLIFIERS, Public Address—see SYSTEMS, Public Address**

## ANALYZERS

1. **Circuit**
2. **Circuit Breaker**
3. **Differential**
4. **Illumination**
5. **Industrial**

Airserco Mfg. Co., Inc., 435 Melwood St., Pittsburgh 13, Pa. (1, 5)  
Bourne Laboratories, Instrument Sales Corp., 6135 Magnolia Ave., Riverside, Calif. (1)  
Cincinnati Clock & Instrument Co., 1060 Hulbert St., Cincinnati 14, Ohio (2)  
Cutler-Hammer, Inc., 288 N. 12th St., Milwaukee 1, Wis. (1, 2, 5)  
EPCO Electronics, Inc., 140 Liberty St., N. Y. 6, N. Y. (1)  
Federal Telephone and Radio Co., 100 Kingsland Rd., Clifton, N. J. (1)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (3)  
General Electronic Distributing Co., 98 Park Pl., New York 7, N. Y. (1)  
General Scientific Equipment Co., 27th & Huntingdon Sts., Phila. 32, Pa. (5)  
I.T.E. Circuit Breaker Co., 19th & Hamilton Sts., Phila. 30, Pa. (1)  
Instrument Laboratories, 315 W. Walton Pl., Chicago 10, Ill. (1, 5)  
Jackson Electrical Instrument Co., 18 S. Patterson Blvd., Dayton 2, Ohio (1)  
Librascope, Inc., 808 Western Ave., Glendale 1, Calif. (3)  
Mine Safety Appliances Co., 201 N. Braddock Ave., Pittsburgh 8, Pa. (5)  
Multi-Amp Corp., 10 Third St., Newark 7, N. J. (2)  
Scott, Inc., Hermon Hosmer, 385 Putnam Ave., Cambridge 39, Mass. (5)  
Sensitive Research Instrument Corp., 9 Elm Ave., Mount Vernon, N. Y. (3)  
Sticht Co., Inc., Herman H., 27 Park Place, New York 7, N. Y. (1, 5)

Tech Labs Inc., Bergen & Edsall Bldgs., Palisades Park, N. J. (1)  
 Venus Products Co., 6627 S. Ashland Ave., Chicago 36, Ill. (5)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (5)  
 Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark 5, N. J. (1, 4, 5)

**ANALYZERS—see also TESTERS; DETECTORS; LOCATORS**

**ANCHORS**

1. Cable
2. Drive
3. Guy, Earth
4. Guy, Rock

Ackerman-Johnson Co., 625 Jackson Blvd., Chicago 6, Ill. (1, 2, 4)  
 Alhambra Foundry Co., Ltd., 1147 Meridian Ave., Alhambra, Calif. (1, 3)  
 Arro Expansion Bolt Co., 1540 Boone Ave., Marion, Ohio (2)  
 Chain Belt Co., 4701 W. Greenfield Ave., Milwaukee 1, Wis. (3)  
 Chance Co., A. B., 210 N. Allen St., Centralia, Mo. (3, 4)  
 Copperweld Steel Co., Wire and Cable Div., Glassport, Pa. (3, 4)  
 Dale Products, Inc., Columbus, Neb. (3, 4)  
 Diamond Expansion Bolt Co., Inc., Garwood, N. J. (2)  
 Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa. (1)  
 Electrical Mfg. Co., Box 217, Battle Creek, Mich. (3, 4)  
 Grip-Tite Mfg. Co., 115 W. Jefferson St., Winterset, Iowa (3, 4)  
 Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa. (1, 3, 4)  
 Hughes Bros., Inc., Seward, Neb. (3)  
 Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (3, 4)  
 Kearney Corp., James R., 4236 Clayton Ave., St. Louis 10, Mo. (3)  
 Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif. (4)  
 Liebfried Mfg. Corp., C. H., 95-101 Guernsey St., Brooklyn 22, N. Y. (3, 4)  
 Line Material Co., 700 West Michigan St., Milwaukee, Wis. (3, 4)  
 Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (3, 4)  
 Poles, Inc., E. 706 Sprague Ave., Spokane 3, Wash. (3)  
 Rawplug Co., Inc., 271 Church St., N. Y. 13, N. Y. (2)  
 Rocket Devices Corp., 142 Liberty St., New York 6, N. Y. (2)  
 Siebring Mfg. Co., George, Iowa (3)  
 Southco Div., South Chester Corp., Lester, Pa. (2)  
 Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (1)  
 Super-Grip Anchor Bolt Co., Inc., 3333 N. 22 St., Phila. 40, Pa. (1, 2)  
 Utilities Service Co., 1 Pine St., Allentown, Pa. (3, 4)  
 Varo Mfg. Co., Inc., 1801 Walnut St., Garland, Tex. (2, 3)

**ANCHORS, Expansion Screw—see BOLTS, Expansion**

**ANGLE, Framing—see FRAMING**

**ANNUNCIATORS**

1. Drop and Lamp
2. Electric Reset

Acme Fire Alarm Company, Inc., 106 Seventh Ave., New York 13, N. Y. (1)  
 Auth Electric Co., Inc., 34-20 45th St., L. I. C. 1, N. Y. (1, 2)  
 Autocal Co., Shelby, Ohio (1, 2)  
 Connecticut Telephone & Electric Corp., 70 Britannia St., Meriden, Conn. (1, 2)  
 Cooper Hewitt Electric Co., 720-732 Grand St., Hoboken, N. J. (1, 2)  
 Couch Co., Inc., S. H., 3 Arlington St., North Quincy 71, Mass. (1, 2)  
 Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (2)  
 Edwards Co., Inc., Norwalk, Conn. (1, 2)  
 Electro Devices Inc., 4025 Easton Ave., St. Louis 13, Mo. (1, 2)  
 Henschel Corp., 14 Cedar St., Amesbury, Mass. (1)  
 International Business Machines Corp., 590 Madison Ave., N. Y. 22, N. Y. (1, 2)  
 Kirkland Co., H. R., 8 King St., Morristown, N. J. (2)  
 New Jersey Fire Alarm Co., 37 S. 8th St., Newark 7, N. J. (1)  
 Panalamp Div., Panellit, Inc., 7401 N. Hamlin Ave., Skokie, Ill. (1, 2)  
 Partridge & Wilkins Co., 51 N. Seventh St., Phila. 6, Pa. (1, 2)  
 Scam Instrument Corp., 3909 Irving Park Rd., Chicago 18, Ill. (1, 2)  
 Signal Engineering & Mfg. Co., Branchport Ave., Long Branch, N. J. (1, 2)  
 Sperti Faraday, Inc., 1322 E. Church St., Adrian, Mich. (1, 2)  
 Superior Appliance Co., 73-39 Central Ave., Glendale 27, N. Y. (1, 2)  
 Tigerman Engineering Co., 4332 N. Western Ave., Chicago 18, Ill. (1, 2)

**ANODES, Carbon and Graphite**

Belmont Smelting & Refining Works, Inc., 330 Belmont Ave., Brooklyn 7, N. Y.  
 Chapin Co., Inc., Chas. E., 227 Fulton St., N. Y. 7, N. Y.  
 Great Lakes Carbon Corp., 18 E. 48 St., N. Y. N. Y.  
 Speer Carbon Co., International Graphite & Electrode Div., Theresa St., St. Marys, Pa.  
 Stackpole Carbon Co., Tannery St., St. Marys, Pa.

**ARMATURES, Replacement**

General Armature & Mfg. Co., P. O. Box 370, Lock Haven, Pa.  
 Star-Kimble Motor Div., Miehl Printing Press & Mfg. Co., 200 Bloomfield Ave., Bloomfield, N. J.  
 Viber Co., 726 S. Flower St., Burbank, Calif.

**ARMS, Lamp, Adjustable and Flexible**

Eagle Electric Mfg. Co., Inc., 2-10 Bridge Plaza South, Long Island City 1, N. Y.  
 Elite Glass Co., Inc., 111 W. 22 St., N. Y. 11, N. Y.  
 General Lamps Mfg. Corp., Elwood, Ind.  
 Rodale Mfg. Co., Inc., 6th & Minor Sts., Emmaus, Pa.  
 White Co., O. C., 15-21 Hermon St., Worcester 8, Mass.  
 Woodward Machine Co., Lighting Div., 4833 Elm-hurst, Detroit 4, Mich.

**ARRESTERS**

1. Lightning, Power
2. Static

Brach Mfg. Corp., 200 Central Ave., Newark, N. J. (1)  
 Brown Boveri Corp., 19 Rector St., N. Y. 6, N. Y. (1)  
 Carbone Corp., 400 Myrtle Ave., Boonton, N. J. (2)  
 Chance Co., A. B., 210 N. Allen St., Centralia, Mo. (1)  
 Eagle Electric Mfg. Co., Inc., 2310 Bridge Plaza South, Long Island City 1, N. Y. (1)  
 Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa. (1)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1)  
 Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa. (1)  
 Kearney Corp., James R., 4236 Clayton Ave., St. Louis 10, Mo. (1)  
 Line Material Co., 700 West Michigan St., Milwaukee, Wis. (1)  
 Ohio Brass Co., 380 N. Main St., Mansfield, Ohio (1)  
 R T & E Co., 1900 E. North St., Waukesha, Wis. (1)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1)  
 ● **WESTINGHOUSE ELECTRIC SUPPLY CO., 40 Wall St., New York 5, N. Y. (1)—ADV. PG. SECOND COVER**

**ASBESTOS, Board**

Auburn Mfg. Co., Pease Ave. & Stack St., Middletown, Conn.  
 Carey Mfg. Co., Philip, Cincinnati 15, Ohio  
 Johns-Manville, 22 E. 40 St., New York 16, N. Y.  
 Keasbey & Mattison Co., Butler Ave., Ambler, Pa.  
 Rogers Corp., Rogers, Conn.  
 Speaker Corp., J. W., 3059 N. Weil St., Milwaukee 12, Wis.  
 Standard Asbestos Mfg. Co., 860 W. Evergreen Ave., Chicago 22, Ill.

**AUGERS and DIGGERS, Pole Hole**

Four Wheel Drive Auto Co., 105 E. 12 St., Clintonville, Wis.  
 Mall Tool Co., 7740 S. Chicago Ave., Chicago 19, Ill.  
 Multi-Matic Corp., 14741 Bessemer St., Van Nuys, Calif.  
 Salem Tool Co., 767 S. Ellsworth Ave., Salem, Ohio  
 Utilities Service Co., 1 Pine St., Allentown, Pa.  
 Williams Mfg. Co., Hugh B., 8330 Lovett St., (P. O. Box 7815), Dallas, Tex.

**B**

**BAGS, Tool**

Astrup Co., 2937 W. 25 St., Cleveland 13, Ohio  
 Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa.  
 Chance Co., A. B., 210 N. Allen St., Centralia, Mo.  
 Dorsey Co., John E., 80 K St., Boston 27, Mass.  
 Industrial Products Co., 2695 N. Fourth St., Phila. 33, Pa.  
 Klein & Sons, Mathias, 7200 McCormick Rd., Chicago 14, Ill.  
 Kline, Savage Co., Inc., 163 N. Third St., Phila. 6, Pa.  
 Miller Equipment Co., Inc., 13th & New Streets, Franklin, Pa.  
 Specialty Live Line Tool Co., 973 86th Ave., Oakland 21, Calif.  
 Stevens Walden Inc., 400 Shrewsbury St., Worcester, Mass.  
 Utilities Safety Supply Co., Inc., 3112 Indiana Ave., Kansas City 3, Mo.

**BALANCERS, Armature**

1. Dynamic
2. Static

Annis Co., R. B., 1101 N. Delaware St., Indianapolis 2, Ind. (1, 2)

**Fluorescent Ballasts**



General Electric has a complete line of high-quality fluorescent ballasts designed to help you save lighting dollars six ways:

- **Sound Rating**—To meet your sound-level requirements.
- **Uniformly High Quality**—Saves on early replacement and maintenance.
- **Longer Life**—Cooler operating G-E ballasts can mean up to 50 per cent longer ballast life.
- **Product Leadership**—Provides top-quality benefits.
- **Customer Services**—A real saving to you from G.E.'s complete sales and engineering organization.
- **Lamp-matched Design**—Offers you more light and lower lamp-replacement costs.

Consult classified section of phone book for address of nearest G-E Apparatus Agent-Distributor, or write direct to General Electric Co., Section 640-428, Schenectady 5, N. Y.

**GENERAL ELECTRIC**

Balance Engineering Co., 5030 W. Lake St., Chicago 44, Ill. (1, 2)  
 Crown Industrial Products Co., 713 Amsterdam St., Woodstock, Ill. (2)  
 Gelber Co., Samuel S., 162 N. Clinton St., Chicago 6, Ill. (2)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1)  
 Gisholt Machine Co., 1245 E. Washington Ave., Madison 10, Wis. (1, 2)  
 Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo. (1)  
 Merrill Engineering Laboratories, 1240 Lincoln, Denver 3, Colo. (1, 2)  
 Micro Balancing Inc., Garden City Park, Long Island, N. Y. (1)  
 Potter & Rayfield, Inc., P. O. Box 1042, Atlanta, Ga. (1, 2)  
 Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa. (2)  
 Vibroscope Co., Route 28, Near Kingston (P. O. Box 97), Glenford, N. Y. (1)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1)

**BALCONIES and SEATS, Pole Line**

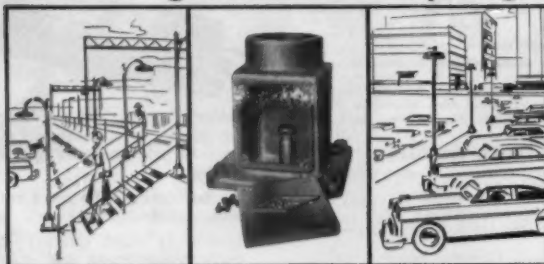
Cope, Inc., T. J., 711 S. 50 St., Phila. 43, Pa.  
 Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa.  
 Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill.  
 Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif.  
 Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa.  
 Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa.  
 Utilities Service Co., 1 Pine St., Allentown, Pa.

**BALLASTS, Lamp**

1. Fluorescent
2. Germicidal
3. Mercury Vapor

Acme Electric Corp., 36 Water St., Cuba, N. Y. (1)  
 ● **ADVANCE TRANSFORMER CO., 2950 N. Western Ave., Chicago 18, Ill. (1, 2, 3)—ADV. PG. 109**  
 Coll Co. of America, Inc., 8 Washington St., Northvale, N. J. (1, 2, 3)  
 Cooper Hewitt Electric Co., 720-732 Grand St., Hoboken, N. J. (1, 2, 3)  
 Day-Ray Products, Inc., 133 Mission St., South Pasadena, Calif. (1)  
 Duro-Test Corp., 2321 Hudson Blvd., North Bergen, N. J. (1)  
 France Mfg. Co., 10325 Berea Rd., Cleveland 2, Ohio (1)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 3)

## A rigid support for cut-to-length pipe A watertight chamber for splicing



COMBINED IN THE NEW HOPE METAL-PIPE BASE for your outdoor lighting jobs! Cut Standard pipe to length—thread it to fit the Hope Metal-Pipe Base and to take the lighting fixture—and you have a complete custom-made, low-cost lighting standard. Buy the components through your electrical wholesaler—assemble them yourself—install the standards for signs, signals, platforms and plant lighting jobs. Bases made for 2", 2½", 3" and 4" pipe sizes. See your wholesaler—or write us direct.



**HOPE ELECTRICAL PRODUCTS CO.**  
352 Wilson Avenue, Newark 5, N. J. Mitchell 2-4426

Jefferson Electric Co., 25th & Madison, Bellwood, Ill. (1, 2, 3)  
Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (3)  
Kuhlman Electric Co., 100 26th St., Bay City, Mich. (3)  
Kulka Electric Mfg. Co., Inc., 633 S. Fulton Ave., Mount Vernon, N. Y. (1)  
Lee Electric, Inc., 132 Beckwith Ave., Paterson, N. J. (1)  
Radionic Transformer Co., 411 S. Sangamon St., Chicago 7, Ill. (1, 2)  
Rogers Industries, Inc., 43-49 Bleecker St., New York 12, N. Y. (1)  
Sela Electric Co., 4633 W. 16th St., Chicago 50, Ill. (1, 3)  
Strafield Co., 434 Grand St., Bridgeport 4, Conn. (1)  
Todd Products Co., Inc., 156 Gramatan Ave., Mount Vernon, N. Y. (1, 2, 3)  
Universal Mfg. Corp., 29-51 E. 6th St., Paterson, N. J. (1)  
Wac Engineering Co., 35 S. St. Clair St., Dayton 2, Ohio (1)  
Westinghouse Electric Corp., Lighting Div., 1216 W. 50th St. (P. O. Drawer 5817), Cleveland 1, Ohio (1, 2, 3)

### **BALLISTIC Galvanometers—see GALVANO-METERS**

### **BALLS, Cord, Adjusting**

Rodale Mfg. Co., Inc., 6th & Minor Sts., Emmaus, Pa.

### **BANDING WIRE—see WIRE (Classified as to Usage), Binding, Tinned**

### **BANDERS, Armature**

Chapman Electrical Works Inc., P. E., 1820 Chouteau Ave., St. Louis 3, Mo.  
Potter & Rayfield, Inc., P. O. Box 1042, Atlanta, Ga.  
Security Insert Co., 1300 Arch St., Phila. 7, Pa.

### **BANDING WIRE—see WIRE (Classified as to Usage), Binding, Tinned**

### **BANDS, Pole Stubbing**

Hughes Bros., Inc., Seward, Neb.  
Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill.  
Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif.  
Utilities Service Co., 1 Pine St., Allentown, Pa.

### **BANDS, Secondary Rock, Pole Line—see RACKS, Insulator**

### **BANKS, Infrared Drying and Heating—see HEATERS, Space, Electric Radiant (Infrared Lamp Fixtures)**

### **BARRIERS, Bus, Circuit Breaker and Switch**

Meter Devices Co., 1001 Prospect Ave. S. W., Canton 6, Ohio  
Mica Insulator Co., P. O. Box 1076, Schenectady 1, N. Y.  
Norton Co., 1 New Bond St., Worcester 6, Mass.

### **BARS, Bus—see BUSBARS**

### **BARS, Commutator**

Harvey Aluminum, 19200 S. Western Ave., Torrance, Calif.

### **BARS, Tamping—see TAMPERS**

### **BASES**

1. Attachment Plug
2. Motor, Adjustable
3. Pole, Metal Pipe
4. Snap Switch
5. Vibration Insulating

Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (2)  
American Pulley Co., 4200 Wissahickon Ave., Phila. 29, Pa. (2)  
Argo Products Co., 1008 N. 22 St., St. Louis 6, Mo. (2)  
Arrow-Hart & Hegeman Electric Co., 103 Hawthorn St., Hartford 6, Conn. (1, 4)  
Barry Corp., 700 Pleasant St., Watertown 72, Mass. (5)  
Bryant Electric Co., Box D Barnum Station, Bridgeport 2, Conn. (1, 4)  
Cable Electric Products, Inc., 234 Daboli St., Providence 7, R. I. (1)  
Century Electric Co., 1806 Pine St., St. Louis 3, Mo. (2)  
Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (1, 4)  
Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (1)  
Elliott Mfg. Co., 350 State St., Binghamton, N. Y. (2)  
Equipment Engineering Co., 2853 Columbus Ave., Minneapolis 7, Minn. (2)  
Erlson Mfg. Co., 5209 Euclid Ave., P. O. Box 1401, Cleveland 3, Ohio (1)  
Federal Shock Mount Corp., 1079 Intervale Ave., New York, N. Y. (5)  
Gem Electric Mfg. Co., Inc., 237 37th St., Brooklyn, N. Y. (1)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (2)

Gerbing Mfg. Corp., 11800 Milwaukee Ave., Northbrook, Ill. (2)  
Hope Electrical Products Co., Inc., 338 Wilson Ave., Newark 5, N. J. (3)  
Hubbell Inc., Harvey, State & Bostwick Ave., Bridgeport 2, Conn. (1, 2)  
Kas-Kel Electric Co., Inc., 5 Union Sq., New York 3, N. Y. (1)  
Kulka Electric Mfg. Co., Inc., 633 S. Fulton Ave., Mount Vernon, N. Y. (1)  
Leviton Mfg. Co., Inc., 236 Greenpoint Ave., Brooklyn 22, N. Y. (1)  
Lovesjoy Flexible Coupling Co., 4963 W. Lake St., Chicago 44, Ill. (2)  
Massey, Inc., A. H., 111 3rd St. (P. O. Box 206), Derby, Conn. (1)  
Overly-Hautz Co., 11500 Madison Ave., Cleveland 2, Ohio (2)  
Pass & Seymour, Inc., Syracuse 9, N. Y. (1)  
Revere Electric Mfg. Co., 6017 Broadway, Chicago 40, Ill. (3)  
Robinson Aviation, Inc., Teterboro, N. J. (5)  
Rodale Mfg. Co., Inc., 6th & Minor St., Emmaus, Pa. (1, 2)  
Sausse & Co., M. W., 636 N. Robertson Blvd., Los Angeles 46, Calif. (5)  
Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (4)  
United States Rubber Co., Mechanical Goods Div., 1230 Avenue of the Americas, New York 20, N. Y. (5)  
Woodhead Co., Daniel, 15 N. Jefferson St., Chicago 6, Ill. (1)

### **BASES, Cutout—see HOLDERS, Fuse, Plug**

### **BATTERIES, Flashlight—see BATTERIES, Primary Dry**

### **BATTERIES**

1. Primary Dry
2. Primary Wet
3. Storage

Acme Battery Corp., 59 Pearl St., Brooklyn 1, N. Y. (1)  
American Battery Co., Inc., 1520-26 McGavock St., Nashville, Tenn. (3)  
Bowers Battery & Spark Plug Co., Box 1262, Reading, Pa. (3)  
Bright Star Industries, 600 Getty Ave., Clifton, N. J. (1)  
Burgess Battery Co., Freeport, Ill. (1)  
C & D Batteries, Inc., Conshohocken, Pa. (3)  
Carbone Corp., 400 Myrtle Ave., Buerton, N. J. (1, 2)  
Dillon Corp., Frank W., 2525 S. Grand Ave., Los Angeles 7, Calif. (3)  
DuBois Electric Storage Battery Co., 500 W. DuBois Ave., DuBois, Pa. (2, 3)  
Edison, Inc., Thomas A., Primary Battery Div., Belmont Ave., Bloomfield, N. J. (2)  
Excella Battery Co., Andrews Road (P. O. Box 1597), Columbus, Ga. (3)  
Exide Industrial Div., Electric Storage Battery Co., 42 S. 15 St., Phila. 2, Pa. (3)  
Gould-National Batteries, Inc., Trenton 7, N. J. (3)  
K. W. Battery Co., Inc., 355 Howard St., Skokie, Ill. (3)  
National Carbon Co., 30 E. 42 St., N. Y. 17, N. Y. (1, 2)  
Nickel Cadmium Battery Corp., Easthampton, Mass. (3)  
Olin Mathieson Chemical Corp., Electrical Div., New Haven 4, Conn. (1)  
Perkins Battery Co., 1601 Monroe St., York, Pa. (3)  
Philo Corp., Tlaga & C Sts., Phila. 34, Pa. (1)  
Scranton Battery Corp., Archbald, Pa. (3)  
Standard Electric Co., Inc., 3016 Austin Highway, San Antonio 9, Tex. (3)  
Waterbury Battery Co., 25 N. Washington St., Plainville, Conn. (2)  
Wisconsin Storage Battery Co., 1222 18th St., Racine, Wis. (3)  
Yardney Electric Corp., 40-46 Leonard St., New York 13, N. Y. (2, 3)

### **BATTERY CHARGERS—see CHARGERS, Battery**

### **BAYONETS, Ground Wire—see BRACKETS, Pole Line, Insulator, Metal**

### **BEADS, Insulating**

American Lava Corp., Cherokee Blvd. & Mrs. Rd., Chattanooga 5, Tenn.  
Centralab Div., Globe-Union Inc., 900 E. Keefe Ave., Milwaukee 1, Wis.  
Du-Co Ceramics Co., Main St. Extension (Box 144), Saxenburg, Pa.  
Electrical Refractories Co., 1900 E. Clark St., East Palestine, Ohio  
Lint, Clyde W., 2323 W. 18 St., Chicago 8, Ill.  
Martindale Electric Co., 1309 Hird Ave., Cleveland 7, Ohio  
Rodale Mfg. Co., Inc., 6th & Minor Sts., Emmaus, Pa.  
Saxenburg Ceramics, P. O. Box 100, Saxenburg, Pa.

### **BEARINGS**

1. Bobbitt
2. Ball
3. Jewel
4. Needle
5. Roller
6. Sleeve Type



Auburn Ball Bearing Co., 28 Industrial St., Rochester 14, N. Y. (2)  
 Bronze Bearings, Inc., 340 N. Ave. East, Cranford, N. J. (1, 6)  
 Bunting Brass & Bronze Co., 715 Spencer St., Toledo 1, Ohio (1, 6)  
 Carbone Corp., 400 Myrtle Ave., Boonton, N. J. (6)  
 Chain Belt Co., 4701 W. Greenfield Ave., Milwaukee 1, Wis. (1, 5)  
 Congress Drives Div., Tann Corp., 3750 E. Outer Dr., Detroit 34, Mich. (6)  
 Dodge Mfg. Corp., 1944 S. William St., Mishawaka, Ind. (1, 2, 5, 6)  
 Fafnir Bearing Co., 37 Booth St., New Britain, Conn. (2)  
 Federal Bearings Co. Inc., Poughkeepsie, N. Y. (2)  
 Freeway Washer & Stamping Co., P. O. Box 1756, Cleveland, Ohio (2)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (3, 6)  
 Green Ball Bearing Co., 9518 Cassius Ave., Cleveland 5, Ohio (2)  
 Gwilliam Co., 360 Furman St., Brooklyn 1, N. Y. (2, 5)  
 Hewitt-Robins, Inc., 666 Glenbrook Rd., Stamford, Conn. (1)  
 Hodgkins Co., J. F., 140 Water St., Randolph, Gardner, Maine (1, 6)  
 Hyatt Bearings Div., General Motors Corp., Harrison, N. J. (5)  
 Indus Corp., 1815 Madison Ave., Indianapolis 25, Ind. (2, 6)  
 Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo. (6)  
 Johnson Bronze Co., 490 S. Mill St., New Castle, Pa. (1, 6)  
 Keystone Carbon Co., Inc., 1935 State St., St. Marys, Pa. (6)  
 Linde Air Products Co., 30 E. 42 St., N. Y. 17, N. Y. (3)  
 Link-Belt Co., 307 N. Michigan Ave., Chicago 1, Ill. (1)  
 Marlin-Rockwell Corp., 402 Chandler St., Jamestown, N. Y. (2, 5)  
 Miniature Precision Bearings, Inc., 101 Carpenter St., Keene, N. H. (2)  
 National Lead Co., 111 Broadway, N. Y. 6, N. Y. (1)  
 New Hampshire Ball Bearings, Inc., 20 Grove St., Peterborough, N. H. (2)  
 Nice Ball Bearing Co., 30th & Hunting Park Ave., Phila. 40, Pa. (2)  
 Norma-Hoffmann Bearings Corp., Stamford, Conn. (2, 5)  
 Republic Metals Co., 273 Green St., Brooklyn 22, N. Y. (1)  
 Rollway Bearing Co., Inc., 541 Seymour St., Syracuse 4, N. Y. (5)  
 SKF Industries, Inc., Front St. & Erie Ave., Phila. 32, Pa. (2, 5)  
 St. Marys Carbon Co., State St., St. Marys, Pa. (6)  
 Shenango-Penn Mold Co., West Third St., Dover, Ohio (6)  
 Southwest Products Co., 1705 S. Mountain Ave., Duarte, Calif. (1, 6)  
 Split Ballbearing Corp., 211 Mechanic St., Lebanon, N. H. (2, 5)  
 Swiss Jewel Co., 225 Lafayette Bldg., Phila. 6, Pa. (3)  
 Torrington Co., 59 Field St., Torrington, Conn. (2, 4, 5)  
 Tyson Bearing Corp., Massillon, Ohio (5)  
 Westinghouse Electric Corp., P. O. Box 848, Pittsburgh 30, Pa. (5)

#### BEARINGS, Misc.

Bronze—see BEARINGS, Sleeve Type  
 Carbon—see BRUSHES, Carbon and Metal Graphite  
 Quill—see BEARINGS, Needle  
 Self-Aligning—see BEARINGS, Sleeve Type  
 Self-Lubricating—see BEARINGS, Sleeve Type

#### BEEBWAX

Astrup Co., 2937 W. 25 St., Cleveland 13, Ohio

#### BELLS

1. Combined with Buzzers
2. Hazardous Location
3. Indoor, Line Voltage
4. Indoor, Low Voltage
5. Unmounted
6. Weatherproof

Acme Fire Alarm Company, Inc., 106 Seventh Ave., New York 11, N. Y. (2, 3, 4, 6)  
 Auto Electric Co., Inc., 34-20 45th St., L. I. C. 1, N. Y. (1, 3, 4, 5, 6)  
 Autocal Co., Shelby, Ohio (3, 4, 6)  
 Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (1, 4, 5)  
 Connecticut Telephone & Electric Corp., 70 Britannia St., Meriden, Conn. (1)  
 Cooper Hewitt Electric Co., 720-732 Grand St., Hoboken, N. J. (1, 2, 3, 4, 5, 6)  
 Couch Co., Inc., S. H., 3 Arlington St., North Quincy 71, Mass. (1, 3, 4, 5, 6)  
 Edwards Co., Inc., Norwalk, Conn. (1, 2, 3, 4, 5, 6)  
 Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa. (2, 4, 6)  
 Federal Sign & Signal Corp., 8726 S. State St., Chicago 19, Ill. (2, 3, 4, 5, 6)  
 Gamewell Co., 1238 Chestnut St., Newton Upper Falls 64, Mass. (2, 3, 4, 6)  
 ● GRAYBAR ELECTRIC CO., INC., 420 Lexington Ave., N. Y. 17, N. Y. (2)—ADV. PG. 2

Hose-McCann Telephone Co., Inc., 25th St. & 3rd Ave., Brooklyn 32, N. Y. (6)  
 International Business Machines Corp., 590 Madison Ave., N. Y. 22, N. Y. (3, 4, 6)  
 Lee Electric, Inc., 132 Beckwith Ave., Paterson, N. J. (1, 3, 4)  
 Leviton Mfg. Co., Inc., 236 Greenpoint Ave., Brooklyn 22, N. Y. (4)  
 Liberty Bell Mfg. Co., Inc., Short St., Minerva, Ohio (1, 4)  
 National Time & Signal Corp., 21800 Wyoming Ave., Detroit 7, Mich. (3, 4, 6)  
 Oceanic Electric Products Corp., 187 Water St., New York 38, N. Y. (2, 6)  
 Partrick & Wilkins Co., 51 N. Seventh St., Phila. 6, Pa. (2, 3, 4, 5, 6)  
 Protectowire Co., P. O. Box 0, Hanover, Mass. (4, 6)  
 Reeve Electrical Co., Inc., 416 Broadway, New York 13, N. Y. (1, 3, 4, 5, 6)  
 Reiter Corp., 1917 Henry Ave., S. W. (P. O. Box 408), Canton 1, Ohio (5)  
 Rodale Mfg. Co., Inc., 6th & Minor Sts., Emmaus, Pa. (4)  
 SAFA Alarm Div., Fyr Fyter Co., 243 W. Market St., Orrville, Ohio (4)  
 Signal Engineering & Mfg. Co., Branchport Ave., Long Branch, N. J. (2, 3, 4, 5, 6)  
 Simplex Time Recorder Co., Alice St., Gardner, Mass. (1, 6)  
 Sperti Faraday, Inc., 1322 E. Church St., Adrian, Mich. (1, 3, 4, 5, 6)  
 Spies Electric Works, 564 W. Van Buren St., Chicago 7, Ill. (4, 6)  
 Standard Electric Time Co., 129 Logan St., Springfield, Mass. (1, 3, 4, 6)

#### BELLS, Misc.

Cable End—see POTHEADS  
 Corono—see FITTINGS, Bus  
 Telephone—see TELEPHONES

#### BELT DRESSING—see DRESSING BELTING

1. Canvas
2. Leather
3. Rubber

Auburn Mfg. Co., Pease Ave., & Stack St., Middletown, Conn. (2)  
 Boston Woven Hose & Rubber Co., P. O. Box 1071, Boston 3, Mass. (3)  
 Browning Mfg. Co., Maysville, Ky. (3)  
 Buffalo Weaving & Belting Co., 260 Chandler St., Buffalo 7, N. Y. (1, 3)  
 Chicago Belting Div., Chicago-Allis Mfg. Corp., 125 N. Green St., Chicago 7, Ill. (2)  
 Chicago Rawhide Mfg. Co., 1301 Elston Ave., Chicago 22, Ill. (2)

Congress Drives Div., Tann Corp., 3750 E. Outer Dr., Detroit 34, Mich. (3)  
 Dayton Rubber Co., P. O. Box 1004, Dayton 1, Ohio (3)  
 Dick Co., Inc., R. & J., Passaic, N. J. (3)  
 Goodrich Co., B. F., Industrial Products Div., 500 S. Main St., Akron, Ohio (3)  
 Hewitt-Robins, Inc., 666 Glenbrook Rd., Stamford, Conn. (3)  
 Johnson Belting Co., Inc., 34-44 Hubert St., N. Y. 13, N. Y. (2)  
 Miller Equipment Co., Inc., 13th & New Streets, Franklin, Pa. (1, 2)  
 Minor Rubber Co., Inc., 51 Ackerman St., Bloomfield, N. J. (3)  
 New York Belting & Packing Co., 1 Market St., Passaic, N. J. (3)  
 Raybestos-Manhattan, Inc., 61 Willett St., Passaic, N. J. (3)  
 Rhodes & Sons, J. E., 35 N. Sixth St., Phila. 6, Pa. (2)  
 Stevens Co., A. T., 118 E. 28th St., N. Y. 16, N. Y. (1, 3)  
 Thermold Co., Trenton, N. J. (3)  
 Ton-Tex Corp., 247 Pearl St. N. W., Grand Rapids 2, Mich. (1, 2)

#### BELTS, Chain—see CHAIN, Transmission

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 Kline, Savidge Co., Inc., 163 N. Third St., Phila. 6, Pa.  
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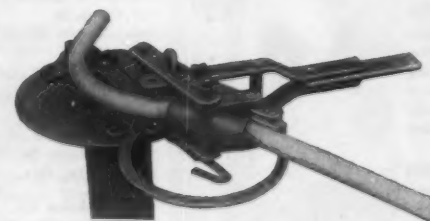
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#### BIMETAL—see METAL, Thermostatic

#### BITS

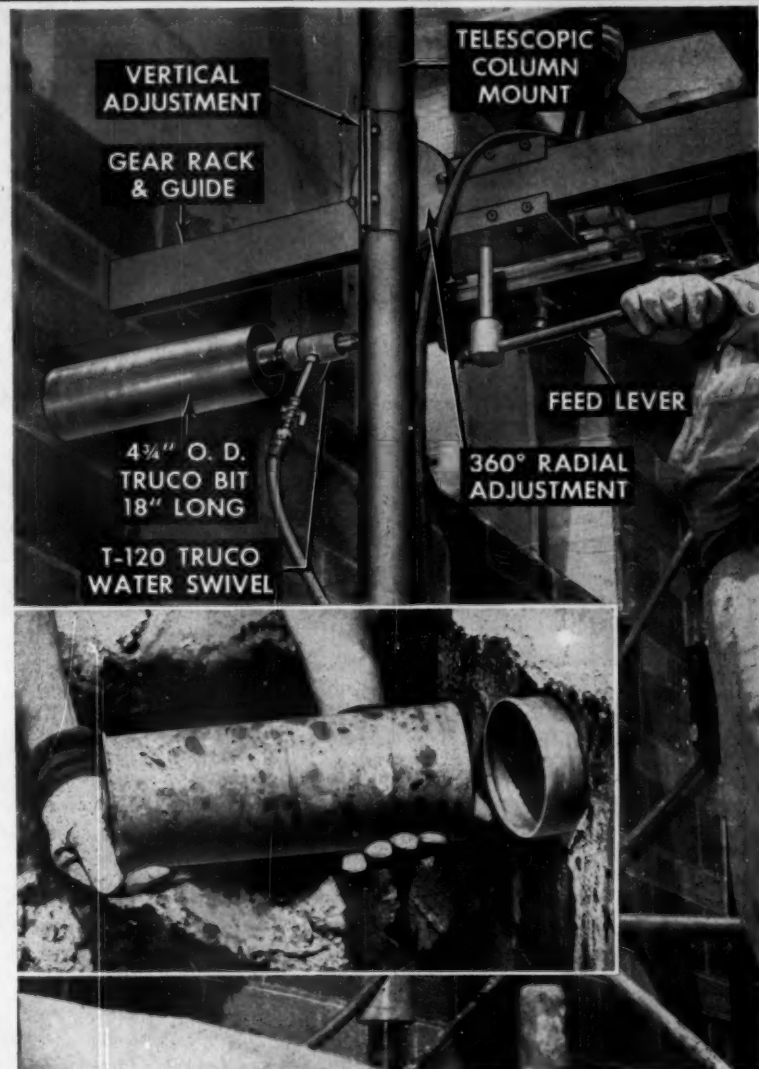
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3. Drill, Masonry
4. Drill, Twist

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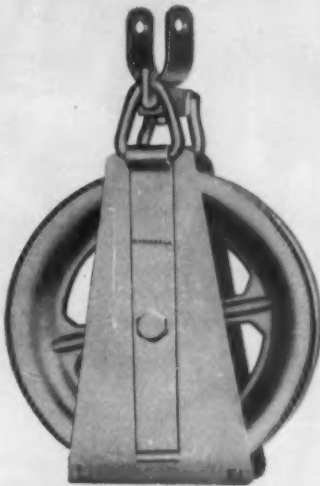
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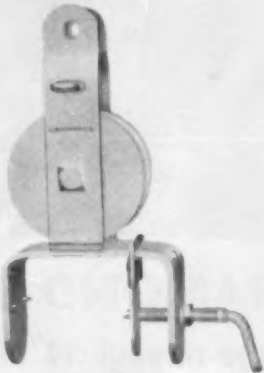
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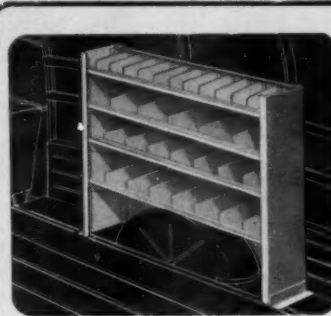
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 Safety Car Heating and Lighting Co., Inc., P. O. Box 904, New Haven 4, Conn. (2)  
 Skil Corp., 5033 Elston Ave., Chicago 30, Ill. (4)  
 Small Motors Inc., 2076 Elston Ave., Chicago 14, Ill. (1, 2, 4)  
 Spencer Turbine Co., 486 New Park Ave., Hartford 6, Conn. (1, 2, 3)  
 Stanat Mfg. Co., 47-24 37th St., L. I. C., N. Y. (1)  
 Sterling Blower Co., 791 Windsor St., Hartford, Conn. (2)  
 Torit Mfg. Co., 292 Walnut St., St. Paul 2, Minn. (2)  
 United Blower Co., Inc., 193 Centre St., N. Y. 13, N. Y. (1)  
 United Electric Motor Co., 178 Centre St., N. Y. 13, N. Y. (1, 4)  
 United States Air Conditioning Corp., Como Ave. S. E. at 33rd, Minneapolis 14, Minn. (2)  
 Universal Electric Co., 300 E. Main St., Owosso, Mich. (2)



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 Waveland Electric Co., 5542 N. Ashland Ave., Chicago 40, Ill. (4)  
 West Wind Corp., 1800 Airport Way, Seattle 4, Wash. (2)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (2)  
 Westinghouse Electric Corp., Sturtevant Div., Damon St., Hyde Park, Boston 36, Mass. (1, 2)  
 Wind-Way Fan & Ventilator Co., 531 St. Joseph St., New Orleans 12, La. (1, 4)

#### BLOWERS, Misc.

Furnace—see FANS, Special Purpose, Furnace  
 Heat—see HEATERS, Space  
 Manhole Ventilating—see FANS, Special Purpose, Manhole Ventilating

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1. Control, Plating Generator
2. Instrument
3. Meter, Adjustable

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 Cambridge Thermionic Corp., 445 Concord Ave., Cambridge 38, Mass. (2)  
 Clement Electric Co., 223 Erie St., N.W., Grand Rapids 2, Mich. (2)  
 Electro Devices, Inc., 4025 Easton Ave., St. Louis 13, Mo. (2)  
 Falstrom Co., 62 Falstrom Court, Passaic, N. J. (2)  
 Glasic Corp., 1823 E. 40 St., Cleveland 3, Ohio (2)  
 Gustavson, Inc., 8600 Chestnut St., Kansas City 30, Mo. (2)  
 Holland & Sons, Inc., J., 475 Keap St., Brooklyn 11, N. Y. (1)  
 Kirk & Blum Mfg. Co., 3120 Forrer St., Cincinnati 9, Ohio (2)  
 Lake Shore Electric Inc., 205 Willis St., Bedford, Ohio (2)  
 Littleford Bros., Inc., 453 E. Pearl St., Cincinnati 2, Ohio (2)  
 Magnetic Amplifiers, Inc., 532 Tinton Ave., N. Y. 55, N. Y. (1, 2)  
 Mica Insulator Co., P. O. Box 1076, Schenectady 1, N. Y. (2)  
 Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla. (1, 2)  
 Overly-Hautz Co., 11500 Madison Ave., Cleveland 2, Ohio (2)  
 Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (1, 2)  
 Paschel Electronics, Inc., 13 Garden St., New Rochelle, N. Y. (2)

Standard Electric Time Co., 129 Logan St., Springfield, Mass. (2)  
 States Co., 19 New Park Ave., Hartford 6, Conn. (3)  
 Taylor Fibre Co., Norristown, Pa. (2)  
 Versabar Corp., 517 Communipaw Ave., Jersey City 6, N. J. (1, 2, 3)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (2)

**BOARD, Asbestos, Fuller and Press—see ASBESTOS, Board; PAPER, Fullerboard and Pressboard**

#### BOARDS, Misc.

Control, Dimmer—see SWITCHBOARDS, Theater  
 Control, Motor—see PANELBOARDS  
 Panel—see PANELBOARDS  
 Terminal—see BLOCKS, Terminal

#### BOBBINS, Coil Winding

American Lava Corp., Cherokee Blvd. & Mfrs. Rd., Chattanooga 5, Tenn.  
 Centralab Div., Globe-Union Inc., 900 E. Keefe Ave., Milwaukee 1, Wis.  
 Emeloid Co., Inc., 1239 Central Ave., Hillside 5, N. J.  
 Estes & Sons, E. B., 100 Fifth Ave., N. Y. 11, N. Y.  
 Federal Telephone and Radio Co., 100 Kingsland Rd., Clifton, N. J.  
 Glasic Corp., 1823 E. 40 St., Cleveland 3, Ohio  
 Gries Reproduction Corp., 123 Beechwood St., New Rochelle, N. Y.  
 Kirchner & Co., Inc., M., 83-91 W. Forest Ave., Englewood, N. J.  
 Mica Insulator Co., P. O. Box 1076, Schenectady 1, N. Y.  
 Silicone Insulation, Inc., 567 Third Ave., New York 16, N. Y.

#### BODIES, Conduit—see FITTINGS, Conduit

#### BODIES AND BINS, Truck

Brennen Co., A. John, 855 N. Rochester Rd., Clawson, Mich.  
 Gar Wood Industries Inc., Wayne, Mich.  
 Highway Trailer Co., 405 E. Fulton St., Edgerton, Wis.  
 Holan Corp., J. H., 4100 W. 150 St., Cleveland 11, Ohio  
 Morrison Steel Products, Inc., 601 Amherst St., Buffalo 7, N. Y.  
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Apex Bolt Products Co., 452-458 N. Claremont Ave., Chicago 12, Ill. (5, 6, 9, 10)  
Argo Products Co., 1008 N. 22 St., St. Louis 6, Mo. (7)  
Armstrong Bros. Tool Co., 5200 W. Armstrong Ave., Chicago 30, Ill. (6)  
Arro Expansion Bolt Co., 1540 Boone Ave., Marion, Ohio (5, 9)  
Atlas Bolt & Screw Co., 1130 Ivanhoe Rd., Cleveland 10, Ohio (1, 2, 6, 7, 8, 10)  
Atlas Screw & Specialty Co., 450 Broome St., N. Y. N. Y. (1, 2, 5, 6, 7, 8, 9, 10)  
Bethlehem Steel Co., Bethlehem, Pa. (1, 3, 6, 7)  
Billings & Spencer Co., 1 Laurel St., Hartford 1, Conn. (6)  
Chase Brass & Copper Co., Inc., 236 Grand St., Waterbury 20, Conn. (1, 2, 7, 8, 9, 10)  
Cincinnati Pump & Mfg. Co., Inc., 3182 Beekman St., Cincinnati 23, Ohio (6, 10)  
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Diamond Expansion Bolt Co., Inc., Garwood, N. J. (5, 9)  
Dossert Mfg. Corp., 249-255 Huron St., Brooklyn 22, N. Y. (7, 10)  
Electrical Engineers Equipment Co., 25th Ave. & Division St., Melrose Park, Ill. (10)  
Electrical Mfg. Co., Box 217, Battle Creek, Mich. (1, 3, 4, 5, 6, 7, 10)  
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Harper Co., H. M. 8200 Lehigh Ave., Morton Grove, Ill. (1, 2, 7, 8)  
Hess Co., Charles, 1951 Flushing Ave., Brooklyn 37, N. Y. (10)  
Holub Industries, Inc., 442 Elm St., Sycamore, Ill. (5, 9)  
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R. E. C. Corp., Cedar & Spring Sts., New Rochelle, N. Y. (2, 4, 6, 10)  
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Fork—see **FITTINGS**, Insulator  
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Leg—see **SCREWS**, Leg

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American Floor Surfacing Machine Co., 518 S. St. Clair St., Toledo 3, Ohio  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
Kolton Electric Mfg. Co., 123 New Jersey Railroad Ave., Newark 5, N. J.  
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Thordarson-Meissner Mfg. Div., Maguire Industries, Inc., Seventh & Belmont Sts., Mt. Carmel, Ill.

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Highway Trailer Co., 405 E. Fulton St., Edgerton, Wis.  
Multi-Matic Corp., 14741 Bessemer St., Van Nuys, Calif.  
Petersen Engineering Co., Mfrs., 460 Kifer Rd., Santa Clara, Calif.  
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Thor Power Tool Co., 175 N. State St., Aurora, Ill.

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Code Products Corp., 214 Kalos St., Phila. 28, Pa. (1)  
General Electric Co., Trumbull Components Dept., 41 Woodford Ave., Plainville, Conn. (1, 2)  
Karp Metal Products Co., 233 63rd St., Brooklyn 20, N. Y. (2)  
Kees Mfg. Co., F. D., P. O. Box 537, Beatrice, Neb. (1, 2)  
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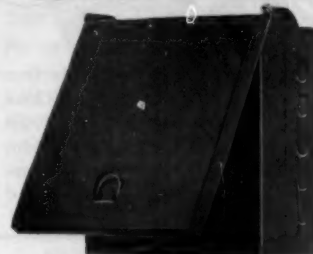


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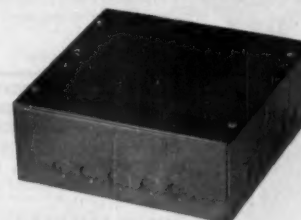
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Fire Alarm—see ALARMS, Fire  
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Manhole—see BOXES, Wiring Device, Under-ground  
Panel—see PANELBOARDS  
Resistance—see RESISTORS, Unit  
Sidewalk—see BOXES, Wiring Device, Under-ground  
Split Joint—see SPLICES, Line  
Stage Plugging—see FIXTURES, Special Purpose, Stage  
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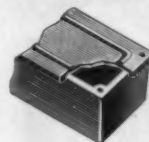
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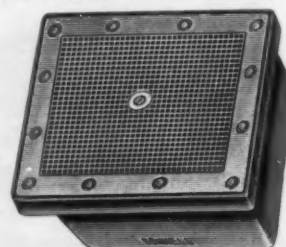
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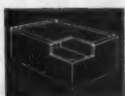
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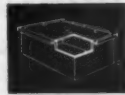
## STANDARD BOXES



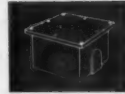
**UNFLANGED JUNCTION AND PULL BOXES**  
H1200 Type • 164 sizes  
from 4 x 2 x 2 to 48 x 36 x 17



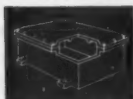
**HINGED WEATHERPROOF BOXES**  
H3200 Type • 128 sizes  
from 5 x 5 x 3 to 36 x 36 x 12



**FLANGED RECESSED COVER BOXES**  
H7000 Type • 51 sizes  
from 4 x 4 x 3 to 30 x 24 x 12



**CHECKERED COVER SIDEWALK BOXES**  
H5800 Type • 53 sizes  
from 6 x 6 x 4 to 36 x 24 x 14



## EXPLOSION HOUSINGS

by Hope, for Class I, Groups C and D hazardous locations.

Order BOXES BY HOPE—standard or with custom modifications—from your electrical distributor. Write to Hope, on company letterhead, for new catalog.

Hope representatives are in all key marketing areas, including Portland, Denver, Dallas, Houston, New Orleans, Atlanta, Chicago, Cleveland, Philadelphia, Boston and Newark.

# HOPE

ELECTRICAL PRODUCTS CO., INC.

338 Wilson Ave., Newark 5, New Jersey  
Mitchell 2-4426

BOWLS, Glass or Plastic—see REFLECTORS, Lighting

## BOXES, Wiring

1. Concrete
2. Floor, Adjustable
3. Floor, Receptacle
4. Hazardous Location
5. Outlet and Switch, Metal
6. Outlet and Switch, Plastic
7. Outlet and Switch, Porcelain
8. Pull and Junction
9. Underground

Adalet Mfg. Co., 14300 Lorain Ave., Cleveland 11, Ohio (4, 5, 8, 9)

Adam Electric Co., Frank, P. O. Box 357, St. Louis, Mo. (2, 3, 8)

Alhambra Foundry Co., Ltd., 1147 Meridian Ave., Alhambra, Calif. (8)

• ALL-STEEL EQUIPMENT INC., Aurora, Ill. (1, 5)—ADV. PG 114

Anderson Brass Works, Inc., P. O. Drawer 2151, Birmingham 1, Ala. (8)

Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. (4, 5, 8)

Arrolet Corp., Foot of Bower St., Montgomery, Pa. (5)

Arrow Conduit & Fittings Corp., 129 30th St., Brooklyn 32, N. Y. (1, 5)

Associated Lighting Service, 876 Kayne St., Redwood City, Calif. (1, 3, 5, 8)

Barber Electric Mfg. Co., Inc., 30 Chestnut St., N. Attleboro, Mass. (8)

Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (4)

Bonnell Electric Mfg. Co., Inc., 192-194 Chambers St., N. Y. 7, N. Y. (1, 4, 5, 8, 9)

Bowers Mfg. Co., Inc., 6700 Avalon Blvd., Los Angeles 3, Calif. (1, 5)

Burns Co., James F., 705-715 Cherry St., Phila. 6, Pa. (2, 3, 4, 5, 8, 9)

Cleveland Switchboard Co., 2925 E. 79 St., Cleveland 4, Ohio (8)

Cole & Co., Inc., C. W., 320 E. 12 St., Los Angeles 15, Calif. (3)

Columbia Metal Box Co., 260 E. 143 St., N. Y. 51, N. Y. (8)

• CROUSE-HINDS CO., Syracuse, N. Y. (4)—ADV. PG. 116-117

Derrick Light & Equipment Co., 1201 E. Daggett (P. O. Box 414), Fort Worth, Tex. (8)

Empire Switchboard Co., Inc., 810 Fourth Ave., Brooklyn 32, N. Y. (8)

Equipment & Service Co., 6815 Oriole Drive, Dallas 9, Texas (5)



# Insulated SWITCH BOXES



No. 9000-F

The modern way for electrical installations in wet wall construction. Box face is automatically the correct 3/8" from the face of stud. One nail holds box rigid. Knockouts remove without prying. Plaster seal protects device threads and eliminates retapping. Available in 3/8" offset for dry wall.

**UNION INSULATING CO.**  
Parkersburg, West Va.

YOUR MOST DEPENDABLE SOURCE  
OF BOXES & FITTINGS...

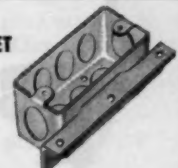
# Arrolet

Preferred by more contractors today, because ARROLET's products answer modern installation problems, saving time and costs.

## HANDY BOX with MOUNTING BRACKET

1 1/2" deep.—Made with new type angle bracket for quick, accurate installations.

Cat. No. H8-10-BA



## 3 1/4" ROUND BOX

3/4" deep.—With or without stud for use in ceiling or wall construction where very shallow box is needed.

Cat. No. 11-5



## NON-GANGABLE SWITCH BOX

1 1/2" deep.—For thin wall or concrete block construction. Available with 1/2" K.O.'s for use with conduit. May be nailed on or can be had with several types of brackets.



Cat. No. 200

## ARROVAL FITTINGS



Oval type, threaded, for standard rigid conduit. In 1/2", 3/4" and 1". Covers and gaskets available in various sizes and types.

ARROLET products are available in an unlimited number of combinations, types, sizes and wiring capacities to fit any job specification.

When you have an installation problem not covered by our standard line, our engineers will design special units to your specifications.

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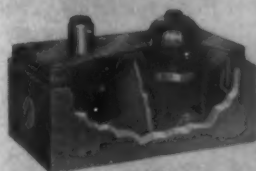
# Latrobe *Electrical* Products



Non-adjustable  
Floor Box



Adjustable  
Floor Box



Adjustable  
Gang Box

## Floor Boxes and Wiring Specialties

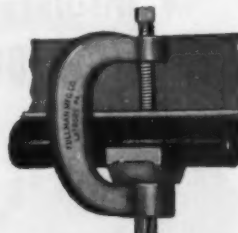
Non-Adjustable Floor Boxes  
Adjustable Floor Boxes  
Gang Boxes . . . Cover Plates  
Junction Boxes . . . Nozzles  
Pipe or Conduit Hangers  
Insulator Supports  
Cable Supports . . . Fish Wire  
Staple and Cable Clips

We are equipped to design and furnish special requirements on short notice—send your blue-prints or rough sketches.

Write for complete catalog and price list.  
Sales Representatives in all principal cities



Nozzle



Pipe or Conduit Hanger



Insulator Support



Staples and  
Cable Clips

## Fullman Manufacturing Co.

1209-1215 JEFFERSON STREET

LATROBE, PA.



## UNION

Non-Metallic



## OUTLET BOXES

No. 4060-D

Much more easily and economically installed than any bar hanger assembly. Mounts firmly to joist or studs with two nails. Supports over 200 lbs. suspended from cover screws. Offers the fastest and most economical installation in basements, closets, garages—any place that ceiling boxes need not be exactly centered in the room.

## UNION INSULATING CO. Parkersburg, West Va.

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Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (5)  
General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn. (2, 3, 5, 6, 7)  
General Electric Co., Distribution Assemblies Dept., 41 Woodford Ave., Plainville, Conn. (8)  
● GRAYBAR ELECTRIC CO., INC., 420 Lexington Ave., N. Y. 17, N. Y. (3)—ADV. PG. 2  
Hoffman Engineering Corp., Anoka, Minn. (8)  
Hope Electrical Products Co., Inc., 338 Wilson Ave., Newark 5, N. J. (4, 8, 9)  
Howard Electric, 1700 N. Kostner Ave., Chicago 39, Ill. (1, 2, 8, 9)  
Huenefeld Co., Engineered Products Div., 2701 Spring Grove Ave., Cincinnati 25, Ohio (8, 9)  
Hughes & Phillips Inc., 3300 N. San Fernando Blvd., Burbank, Calif. (8)  
Illinois Electric Porcelain Co., 510 N. Pearl St., Macomb, Ill. (7)  
Ingersoll-Rand Co., 11 Broadway, N. Y. 4, N. Y. (5)  
Javex, P. O. Box 646, Redlands, Calif. (6)  
Joy Mfg. Co., Electrical Connector Div., 1201 Macklind Ave., St. Louis 10, Mo. (4, 9)  
Karp Metal Products Co., 233 3rd St., Brooklyn 20, N. Y. (5, 8)  
Kees Mfg. Co., F. D., P. O. Box 537, Beatrice, Neb. (1, 9)  
Keystone Mfg. Co., 23328 Sherwood Rd., Centerline, Detroit, Mich. (5, 8)  
Kirk & Blum Mfg. Co., 3120 Forrer St., Cincinnati 9, Ohio (8)  
Knight Electrical Products Corp., 168 Van Brunt St., Brooklyn 31, N. Y. (1, 5)  
Knox Porcelain Corp., 2704 Mynders Ave., (P. O. Box 2031), Knoxville 1, Tenn. (7)  
Kolton Electric Mfg. Co., 123 New Jersey Railroad Ave., Newark 5, N. J. (8)  
Kundu Corp., 1040 W. 12 St., Erie, Pa. (5)  
Lew Electric Fittings Co., 627 W. Lake St., Chicago 6, Ill. (2, 8)  
Meter Devices Co., 1001 Prospect Ave. S. W., Canton 6, Ohio (8, 9)  
Midwest Electric Products, Inc., 1515 N. Front St., Mankato, Minn. (5, 8, 9)  
Multi Electric Mfg. Inc., 4223 W. Lake St., Chicago 24, Ill. (1)  
National Electric Products Corp., Gateway Center, 140 Stanwix St., Pittsburgh 22, Pa. (1, 3, 8, 9)  
Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla. (4, 5, 8)  
● O. Z. ELECTRICAL MFG. CO., INC., 262 Bond St., Brooklyn 17, N. Y. (4, 8)—ADV. PG. 136  
Oceanic Electric Products Corp., 187 Water St., New York 38, N. Y. (8)

Oviatt Co., D. C., 2174 Lakeside Ave., Cleveland 14, Ohio (5)  
 Parker Electrical Mfg. Co., 221 Washington St., Oakland 7, Calif. (8)  
 Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (9)  
 ● **PORCELAIN PRODUCTS, INC.**, P. O. Box 300, Findlay, Ohio (6, 7)—ADV. PG. 139  
 Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (4, 5, 8)  
 Queen Products Co., Inc., Thirteenth & Rowan Sts., Louisville 3, Ky. (5, 8)  
 Rab Electric Mfg. Co., Inc., 605 E. 132 St., New York 54, N. Y. (4, 8, 9)  
 Rattan Mfg. Co., 10 Wall St. (P. O. Box 1745), New Haven 7, Conn. (1, 5)  
 Revere Electric Mfg. Co., 6017 Broadway, Chicago 40, Ill. (8)  
 Richards Co., J. R., P. O. Box 482, Carnegie, Pa. (1, 2, 3, 5)  
 Robb & Blackmer, 129 Pearl St., Boston 10, Mass. (1, 8)  
 Royal Switchboard Co., Inc., 460 Driggs Ave., Brooklyn 11, N. Y. (8)  
 Rusgreen Mfg. Co., 14262 Birwood Ave., Detroit 38, Mich. (8)  
 ● **RUSSELL & STOLL CO., INC.**, 125 Barclay St., New York 7, N. Y. (2, 3, 4, 8)—ADV. PG. THIRD COVER  
 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)  
 Simplot Electric Co., 5136 Park Ave., Sycamore, Ill. (8)  
 Square D Co., 6060 Rivard St., Detroit 11, Mich. (8)  
 Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa. (1, 2, 3, 5)  
 Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (1, 8, 9)  
 Sun Electric Products, Inc., 28 S. Day St., Orange, N. J. (8)  
 Superior Porcelain Co., 931½ Market St., Parkersburg, W. Va. (7)  
 Thepitt Mfg. Co., Gregg & Hammond Sts., Carnegie, Pa. (5)  
 Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J. (2, 3, 8)  
 Union Insulating Co., Inc., Box 351, Parkersburg, W. Va. (6)  
 Williams Products Co., H. E., 106 S. Main St., Carthage, Mo. (5, 8)

#### BRACES, Bit

1. Angle and Ratchet
2. Standard

Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa. (2)  
 Millers Falls Co., 57 Wells St., Greenfield, Mass. (1, 2)  
 Oxwall Tool Co., Ltd., 928 Broadway, New York 10, N. Y. (1, 2)  
 Yankee Tools, Lehigh Ave. & American St., Phila. 33, Pa. (2)

#### BRACES, Pole Line

1. Cross Pole
2. Crossarm
3. Drop Type
4. Vertical Arm

American Crossarm & Conduit Co., 7726 Sheridan Rd., Chicago 28, Ill. (2)  
 Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (2, 4)  
 Brewer-Titchener Corp., 111 Port Watson St., Cortland, N. Y. (1, 2, 4)  
 Brooks Lumber Co., P. O. Box 153, Bellingham, Wash. (2)  
 Electrical Mfg. Co., Box 217, Battle Creek, Mich. (1, 2, 3, 4)  
 Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa. (1, 2, 3, 4)  
 Hughes Bros., Inc., Seward, Neb. (1, 2, 3, 4)  
 Koppers Co., Inc., Wood Preserving Div., Koppers Bldg., Pittsburgh 19, Pa. (1, 2)  
 Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif. (1, 2, 3, 4)  
 Line Material Co., 700 West Michigan St., Milwaukee, Wis. (2)  
 Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (1)  
 Pacific Car and Foundry Co., 4th & Factory, Renton, Wash. (2)  
 St. Louis Malleable Casting Co., 7701 N. Conduit Ave., St. Louis 15, Mo. (2)  
 Sante Fa Tank & Tower Co., 5401 S. Boyle Ave., Los Angeles 58, Calif. (2)  
 Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa. (2, 3, 4)  
 Utilities Service Co., 1 Pine St., Allentown, Pa. (1, 2, 3, 4)  
 Wrought Washer Mfg. Co., 2280 S. Bay St., Milwaukee 7, Wis. (1, 2)

#### BRACES, Trench, Adjustable

Swett Iron Works, A. L., 166 Glenwood Ave., Medina, N. Y.  
 Templeton, Kenly & Co., Gardner Rd., Broadview, Ill.

#### BRACES, Misc.

Alley Arm—see BRACES, Pole Line, Cross-arm  
 Switch Box—see HANGERS, Outlet

You can get **WHAT** you want  
**WHEN** you want it from the



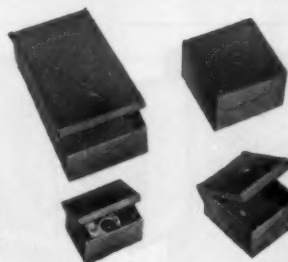
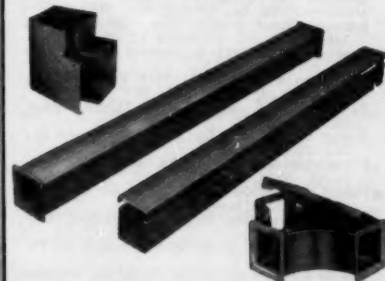
## KEYSTONE QUALITY LINE

WIREWAYS AND FITTINGS • CUTOUT AND PULL BOXES  
 SWITCH BOXES • OUTLET BOXES • BAR HANGERS



SERVICE is the "keynote" at Keystone! And one good example is the fact that every item in the complete Keystone Line is stocked for immediate shipment . . . direct to you . . . to or through your local electrical distributor. No delays on the job, no partial deliveries! You'll find, too, that every item is priced right . . . quality-built to save time, reduce costs, increase your profits per job!

**KEYSTONE WIREWAYS** and Auxiliary Fittings have all the time-saving, money-saving features your customers want. They're quickly, easily installed, readily adaptable to any power distribution system. Available, too, in both flanged and flangeless styles and a wide range of sizes and lengths . . . from 2½" x 2½" x 1 ft. through 8" x 8" x 5 feet long.



**KEYSTONE CUTOUT BOXES** and Pull Boxes are furnished in Type "A" with hinged cover, Type "SC" with screw cover. Both feature a formed construction strongly fabricated and securely welded . . . with adequate, easily removable knockouts. And both types are available in a complete range of sizes . . . stocked for prompt delivery to meet your needs.

**KEYSTONE SWITCH BOXES** and Outlet Boxes are loaded with extra quality features! BX or Romex clamps are already assembled with nested fit for easy pulling of wires. Knockouts and pri-outs come out double quick. And tapped holes are extruded to provide extra thickness, eliminate stripping of threads. Even mounting brackets make installation easier.



Now fact-filled, illustrated catalog presents the complete Keystone Quality Line . . . send for your free copy today!



## KEYSTONE MANUFACTURING COMPANY

23328 SHERWOOD AVENUE • CENTER LINE (Detroit) MICHIGAN

... the Complete Line of Wiring Installation Equipment  
 Sold Only through recognized Electrical Distributors

## PRODUCT DIRECTORY

### BRACKETS

1. House Service Wire
2. Lamp Lead
3. Meter
4. Pothead
5. Street Lighting
6. Switchboard Instrument
7. Transformer

Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (5)  
**● BLACKHAWK INDUSTRIES**, 250 S. Main St., Dubuque, Iowa. (1)—ADV. PG. 97  
 Brewer-Titchener Corp., 111 Port Watson St., Cortland, N. Y. (5, 7)  
 Electrical Mfg. Co., Box 217, Battle Creek, Mich. (1, 2, 5, 7)  
 Elreco Corp., 2900-18 Cornany Ave., Cincinnati 25, Ohio (5)  
 Great Northern Mfg. Corp., 1056 N. Wood St., Chicago 22, Ill. (5)  
 Gries Reproducer Corp., 123 Beechwood St., New Rochelle, N. Y. (7)  
 Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa. (1, 2, 5, 7)  
 Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif. (1, 5, 7)  
 Kuhlman Electric Co., 1000 26th St., Bay City, Mich. (7)  
 Leibfried Mfg. Corp., C. H., 95-101 Guernsey St., Brooklyn 22, N. Y. (5)  
 Line Material Co., 700 West Michigan St., Milwaukee, Wis. (1, 5, 7)  
 Lint, Clyde W., 2323 W. 18 St., Chicago 8, Ill. (1)  
 M. & W. Electric Mfg. Co., Inc., S. Walnut St. (P. O. Box 87), East Palestine, Ohio (1)  
 Malleable Iron Fittings Co., Branford, Conn. (1, 7)  
 Millerbernd Mfg. Co., Winsted, Minn. (5)  
 National Electric Products Corp., Gateway Center, 140 Stanwix St., Pittsburgh 22, Pa. (1)  
 Nepo Mfg. Co., 6025 N. Keystone Ave., Chicago 30, Ill. (5)  
 Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (1, 2, 5, 7)  
 Pacific Car and Foundry Co., 4th & Factory, Renton, Wash. (5)  
 Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (4)  
 Philadelphia Electrical & Mfg. Co., 1200-36 N. 31 St., Phila. 21, Pa. (5)  
**● PORCELAIN PRODUCTS, INC.**, P. O. Box 300, Findlay, Ohio (1)—ADV. PG. 139  
 Revere Electric Mfg. Co., 6017 Broadway, Chicago 40, Ill. (5)  
 Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa. (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13)  
 Superior Porcelain Co., 931½ Market St., Parkersburg, W. Va. (1)  
 Thomason Products Co., 4630 Beverly Dr., Dallas 5, Tex. (3)  
 Union Metal Mfg. Co., 1432 Maple Ave., Canton 5, Ohio (5)  
 Utilities Service Co., 1 Pine St., Allentown, Pa.  
 Versabar Corp., 517 Communipaw Ave., Jersey City 6, N. J. (6, 7)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (7)

### BRACKETS, Pole Line

1. Break Arm
2. Corner Construction
3. Crossarm
4. Extension
5. Hook
6. Insulator, Metal
7. Insulator, Wall
8. Insulator, Wood
9. Neutral
10. Pin
11. Pole Top
12. Ridge
13. Transposition

American Crossarm & Conduit Co., 7726 Sheridan Rd., Chicago 26, Ill. (8)  
 Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (3, 11)  
 Brewer-Titchener Corp., 111 Port Watson St., Cortland, N. Y. (2, 3, 4, 9, 11, 12, 13)  
 Cincinnati Pump & Mfg. Co., Inc., 3182 Beekman St., Cincinnati 23, Ohio (5)  
 Electrical Mfg. Co., Box 217, Battle Creek, Mich. (1, 2, 3, 4, 5, 7, 8, 9, 11, 12)  
 Estes & Sons, E. B., 100 Fifth Ave., N. Y. 11, N. Y. (8)  
 Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (6)  
 Halsey & Co., Inc., R. G., 767 Spitzer Bldg., Toledo 4, Ohio (8)  
 Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa. (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13)  
 Hughes Bros., Inc., Seward, Neb. (10, 11)  
 Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (1, 2, 3, 4, 5, 9, 10, 11, 13)  
 Kirk & Blum Mfg. Co., 3120 Forrer St., Cincinnati 9, Ohio (2)  
 Knox Porcelain Corp., 2706 Mynders Ave., (P. O. Box 2031), Knoxville 1, Tenn. (6, 8)  
 Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif. (1, 2, 3, 4, 5, 7, 10, 11, 13)  
 Leibfried Mfg. Corp., C. H., 95-101 Guernsey St., Brooklyn 22, N. Y. (1, 5, 6, 13)  
 Line Material Co., 700 West Michigan St., Milwaukee, Wis. (3, 4, 6, 11, 13)  
 Lint, Clyde W., 2323 W. 18 St., Chicago 8, Ill. (6)  
 Nepo Mfg. Co., 6025 N. Keystone Ave., Chicago 30, Ill. (6, 11)  
 Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12)

Pacific Car and Foundry Co., 4th & Factory, Renton, Wash. (3)  
**● PORCELAIN PRODUCTS, INC.**, P. O. Box 300, Findlay, Ohio (6, 7)—ADV. PG. 139  
 Revere Electric Mfg. Co., 6017 Broadway, Chicago 40, Ill. (3)  
 St. Louis Malleable Casting Co., 7701 N. Conduit Ave., St. Louis 15, Mo. (1, 2, 3, 6, 7, 9, 11)  
 Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa. (1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13)  
 Sperry Electric Corp., 20500 St. Clair Ave., Cleveland 17, Ohio (6)  
 Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa. (8)  
 Thomas Associates, 4607 Alger St., Los Angeles 39, Calif. (2, 4)  
 Utilities Service Co., 1 Pine St., Allentown, Pa. (1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13)  
 Versabar Corp., 517 Communipaw Ave., Jersey City 6, N. J. (6, 7)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (3)

### BRACKETS, Misc.

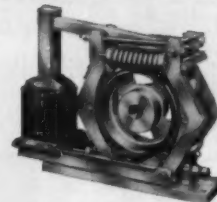
Bayonet—see **BRACKETS**, Pole Line, Insulator, Metal  
 Outlet Box—see **HANGERS**, Outlet

**BRAID**, Copper—see **CONDUCTOR**, Braided Copper

### BRAKES, Magnetic

Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis.  
 DeWalt Inc., Fountain Ave., Lancaster, Pa.  
 Dynamic Div., Eaton Mfg. Co., Kenosha, Wis.  
 Electric Controller & Mfg. Co., 4493 Lee Rd., Cleveland 28, Ohio  
 General Control Co., 1200 Soldiers Field Rd., Boston 34, Mass.  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
 General Riveters Inc., Electro-Mechanical Div., 785 Hertel Ave., Buffalo 7, N. Y.  
 Globe Industries, Inc., 1784 Stanley Ave., Dayton 4, Ohio  
 Robot Appliances, Inc., 7041 Orchard St., Dearborn, Mich.  
 Star-Kimble Motor Div., Miehle Printing Press & Mfg. Co., 200 Bloomfield Ave., Bloomfield, N. J.  
 Stearns Magnetic Inc., 698 S. 28th St., Milwaukee 46, Wis.  
 Trombetta Solenoid Corp., 329 N. Milwaukee St., Milwaukee 2, Wis.  
 Vickers Electric Div., Vickers, Inc., 1847 Locust St., St. Louis 3, Mo.  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.

## SOLENOID OPERATED BRAKES



SB-373 BRAKE 480 FT.-LBS.

Complete line of solenoid operated brakes. Torque capacities from 3 to 24,000 ft. lbs. continuous duty; 5 to 31,200 ft. lbs. half hour duty. Wheel diameters 2.5" to 72". Wheel faces 1.5" to 14". Single or double solenoid operated.

Brakes designed with operating solenoid of sufficient capacity to insure best design of brake wheel, and to allow use of linings with most stable coefficient of friction. 40% to 50% of solenoid capacity reserved for lining wear, giving longer periods between adjustments. Because brake shoe clearance is divided equally and automatically between the two shoes, there is no need to use feeler gauges, and brake can be adjusted while in operation. All parts of the brake are designed for maximum heat dissipation. Torque springs have extremely flat characteristics allowing finer torque adjustment; and giving minimum torque decrease between adjustments.

Write for Engineering Bulletin EE-180—  
 "Fundamental Properties of Brakes."

## TROMBETTA SOLENOID CORP.

MILWAUKEE WISCONSIN  
 U.S.A.

### BRANDERS, Electric

Everhart Mfg. Co., 57 S. 19th Ave., Maywood, Ill.  
 Hanson Co., C. H., 303 W. Erie St., Chicago 10, Ill.  
 Hexacon Electric Co., 161 W. Clay Ave., Roselle Park, N. J.

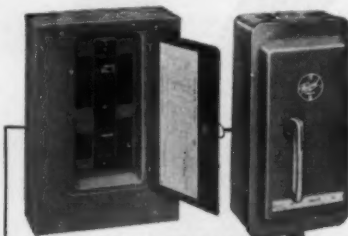
### BRASS, Sheet and Rod

American Brass Co., 414 Meadow St., Waterbury 20, Conn.  
 American Nickeloid Co., Peru, Ill.  
 Chase Brass & Copper Co., Inc., 236 Grand St., Waterbury 20, Conn.  
 Linde Air Products Co., 30 E. 42 St., N. Y. 17, N. Y.  
 Revere Copper & Brass Inc., 230 Park Ave., N. Y. 17, N. Y.

### BREAKERS, Circuit

1. Air, Branch Circuit
2. Air, Over 600 Volts
3. Air, Under 600 Volts
4. Hazardous Location
5. Oil, Over 600 Volts
6. Oil, Under 600 Volts

Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (1, 2, 3, 5, 6)  
 Brown Boveri Corp., 19 Rector St., N. Y. 6, N. Y. (1, 2, 3, 5)  
 Brush Abee, Inc., 60-07 39th Ave., Woodside 77, Long Island, N. Y. (3, 5, 6)  
 Bryant Electric Co., Box D Barnum Station, Bridgeport 2, Conn. (3)  
 Bulldog Electric Products Co., 7610 Joseph Campau, Detroit, Mich. (1)  
**● CROUSE-HINDS CO.**, Syracuse 1, New York (4)—ADV. PG. 116-117  
 Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (1, 2, 3, 4)  
 Federal Pacific Electric Co., 50 Paris St., Newark 5, N. J. (1, 2, 3, 4, 5)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 3, 4, 5, 6)  
 General Electric Co., Distribution Assemblies Dept., 41 Woodford Ave., Plainville, Conn. (3)  
 General Electric Co., Trumbull Components Dept., 41 Woodford Ave., Plainville, Conn. (1)  
 Heinemann Electric Co., Pennsylvania Ave. & Plum St., Trenton 2, N. J. (1, 3, 4)  
 Hopax Electric, Inc., 547 Greenwich St., N. Y. 13, N. Y. (1)  
 Hope Electrical Products Co., Inc., 338 Wilson Ave., Newark 5, N. J. (1, 3, 4)  
**● T. E. CIRCUIT BREAKER CO.**, 19th & Hamilton Sts., Phila. 30, Pa. (1, 2, 3, 4)—ADV. PG. 128  
 Lake Shore Electric Corp., 205 Willis St., Bedford, Ohio (2)



## THE COMPLETE LINE OF CIRCUIT BREAKERS

"MILLIONS-TESTED and millions proved" Federal Noark popular priced Stab-lok® Circuit Breakers available from 15 to 50 amps....single and double pole. Enclosures to meet every need up to 42 circuits.

Heavy duty Type AB-I enclosed Circuit Breakers of long established design. Available in a range from 15 amp., 250 volt (NE Frame), to 600 amp., 600v. (WL Frame) Dionization principle of arc interruption.

Write for full details or see your nearby Federal Noark distributor.

## FEDERAL PACIFIC ELECTRIC COMPANY

FORMERLY FEDERAL ELECTRIC PRODUCTS COMPANY

50 PARIS STREET • NEWARK 1, N. J.



Line Material Co., 700 West Michigan St., Milwaukee, Wis. (1, 5)  
 Mechanical Products, Inc., 1824 River St., Jackson, Mich. (1)  
 Murray Mfg. Corp., 1250 Atlantic Ave., Brooklyn 16, N. Y. (3)  
 Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla. (1, 2, 3, 4, 5)  
 Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (4)  
 Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa. (3, 5)  
 ● **RUSSELL & STOLL CO., INC.**, 125 Barclay St., New York 7, N. Y. (1, 3, 4)—ADV. PG. THIRD COVER  
 Square D Co., 6060 Rivard St., Detroit 11, Mich. (1, 2, 3, 4)  
 Wadsworth Electric Mfg. Co., Inc., 20-34 11th St., Box 272, Covington, Ky. (1, 3)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2, 3, 4, 5, 6)  
 ● **WESTINGHOUSE ELECTRIC SUPPLY CO.**, 40 Wall St., New York 5, N. Y. (1)—ADV. PG. SECOND COVER

#### BRIDGES, Wheatstone

General Radio Co., 275 Massachusetts Ave., Cambridge 39, Mass.  
 Gray Instrument Co., 64 W. Johnson St., Phila. 44, Pa.  
 Industrial Instruments Inc., 89 Commerce Rd., Cedar Grove, N. J.  
 Shallcross Mfg. Co., 33 Lincoln Ave., Collingdale, Pa.  
 Sticht Co., Inc., Herman H., 27 Park Place, N. Y. 7, N. Y.  
 Tech Labs Inc., Bergen & Edsall Bldgs., Palisades Park, N. J.  
 Telectro Industries Corp., 35-16 37th St., Long Island City 1, N. Y.  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.

#### BRONZE

1. Phosphor  
 2. Sheet and Rod  
 American Brass Co., 414 Meadow St., Waterbury 20, Conn. (1, 2)  
 Belmont Smelting & Refining Works, Inc., 330 Belmont Ave., Brooklyn 7, N. Y. (1)  
 Bunting Brass & Bronze Co., 715 Spencer St., Toledo 1, Ohio (1, 2)  
 Chase Brass & Copper Co., Inc., 236 Grand St., Waterbury 20, Conn. (1, 2)  
 Copperweld Steel Co., Wire and Cable Div., Glassport, Pa. (2)  
 Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo. (2)

## Air Circuit Breakers



Type AK-1-50  
 general-purpose  
 enclosure, for  
 indoor wall mounting

Power and lighting circuits require the best protection. Type AK-1 breakers fill the need for dependable protection under a wide variety of conditions.

Air circuit breakers are designed for easy installation and maintenance. They have a wide range of application from 15-4000 amp continuous, 15,000-100,000 amp interrupting rating; 600 volts, a-c; or 250 volts, d-c. Other G-E air circuit breakers available to meet most requirements. Stocked by local distributors for immediate delivery.

Consult classified section of phone book for address of nearest G-E Apparatus Agent-Distributor, or write direct to General Electric Co., Section 640-360A, Schenectady 5, N. Y.

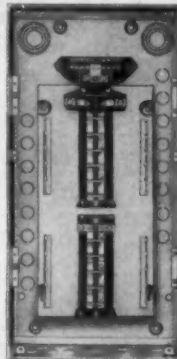
**GENERAL ELECTRIC**



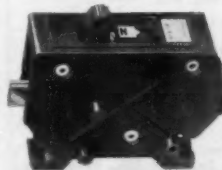
## CIRCUIT BREAKERS

**new**  
 100 AMP.

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## ENCLOSURES



"E-Z-RED"  
 Circuit Breakers  
 Thermal—  
 Magnetic  
 Quick Make  
 Quick Break  
 Trip Free  
 15 to 50 Amperes

**The WADSWORTH ELECTRIC MFG. CO. INC.**  
 Covington, Kentucky  
**WRITE FOR FREE CATALOG**

Johnson Bronze Co., 490 S. Mill St., New Castle, Pa. (1)  
 Linde Air Products Co., 30 E. 42 St., N. Y. 17, N. Y. (1)  
 Metals & Controls Corp., General Plate Div., 34 Forest St., Attleboro, Mass. (1)  
 Phosphor Bronze Corp., 20 Franklin St., Seymour, Conn. (1, 2)  
 Revere Copper & Brass Inc., 230 Park Ave., N. Y. 17, N. Y. (1, 2)  
 Shenango-Penn Mold Co., West Third St., Dover, Ohio (1, 2)

#### BRUSHES

1. Carbon and Metal Graphite  
 2. Copper Leaf and Gauze  
 Becker Bros. Carbon Co., 3450 So. Laramie Ave., Cicero 50, Ill. (1, 2)  
 Carbon Engineering Corp., P. O. Box 236, Slinger, Wis. (1, 2)  
 Carbone Corp., 400 Myrtle Ave., Boonton, N. J. (1)  
 Chapin Co., Inc., Chas. E., 227 Fulton St., N. Y. 7, N. Y. (1, 2)  
 Co-operative Utilities Co., Inc., 4637-39 Mulberry St., Phila. 24, Pa. (1)  
 Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (1)  
 General Carbon Co., 20 North Stenger St., Naperville, Ill. (1)  
 Helwig Co., 254 N. 30 St., Milwaukee 10, Wisconsin (1)  
 Keystone Carbon Co., Inc., 1935 State St., St. Marys, Pa. (1)  
 ● **KIRKWOOD CARBON CORP.**, 4832 Ridge Rd., Cleveland 9, Ohio (1)—ADV. PG. 133  
 National Carbon Co., 30 E. 42 St., N. Y. 17, N. Y. (1)  
 Ohio Carbon Co., 12508 Berea Rd., Cleveland 11, Ohio (1)  
 Pure Carbon Co., Inc., 441 Hall Ave., St. Marys, Pa. (1)  
 St. Marys Carbon Co., State St., St. Marys, Pa. (1)  
 Seager Standard Carbon Co., 291 Church St., New York 13, N. Y. (1, 2)  
 Sittler Corp., 18 N. Ada St., Chicago 7, Ill. (1)  
 Southern Carbon Brush Co., Inc., 7 18th St. S. W. (P. O. Box 1710), Birmingham 8, Ala. (1)  
 Stackpole Carbon Co., Tannery St., St. Marys, Pa. (1)  
 Superior Carbon Products Co., 9115 George Ave., Cleveland 5, Ohio (1)  
 Waveland Electric Co., 5542 N. Ashland Ave., Chicago 40, Ill. (1)

BRUSHES, Plating—see PLATERS

#### BUCKETS, Linemen's Canvas Tool

Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa.

#### BULBS, Incandescent—see LAMPS, Filament

#### BULLS-EYES, Glass

Corning Glass Works, Corning, N. Y.  
 Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y.  
 General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn.  
 Lancaster Lens Co., Lancaster, Ohio  
 Pass & Seymour, Inc., Syracuse 9, N. Y.  
 Rodale Mfg. Co., Inc., 6th & Minor Sts., Emmaus, Pa.  
 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif.

#### BURRS, Rivet

Chase Brass & Copper Co., Inc., 236 Grand St., Waterbury 20, Conn.  
 Wrought Washer Mfg. Co., 2280 S. Bay St., Milwaukee 7, Wis.

#### BUSBARS

1. Aluminum  
 2. Copper

Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa. (1)  
 American Brass Co., 414 Meadow St., Waterbury 20, Conn. (2)  
 Bulldog Electric Products Co., 7610 Joseph Campau, Detroit, Mich. (1, 2)  
 Chase Brass & Copper Co., Inc., 236 Grand St., Waterbury 20, Conn. (2)  
 Electric Service Engineering Co., 10 Third Ave., Joliet, Ill. (2)  
 General Electric Co., Distribution Assemblies Dept., 41 Woodford Ave., Plainville, Conn. (1, 2)  
 Harvey Aluminum, 19200 S. Western Ave., Torrance, Calif. (1)  
 ● **I. T. E. CIRCUIT BREAKER CO.**, 19th & Hamilton Sts., Phila. 30, Pa. (1, 2)—ADV. PG. 128  
 Kaiser Aluminum & Chemical Sales, Inc., 919 N. Michigan Ave., Chicago 11, Ill. (1)  
 ● **PHELPS DODGE COPPER PRODUCTS CORP.**, 40 Wall St., New York 5, N. Y. (2)—ADV. PG. 98-99  
 Revere Copper & Brass Inc., 230 Park Ave., N. Y. 17, N. Y. (1, 2)  
 Reynolds Metals Co., 2500 S. 3rd St., Louisville 1, Ky. (1)  
 Southern Electrical Equipment Co., 308 W. Bond St., Charlotte 3, N. C. (2)

*It doesn't Cost  
 It PAYS to use*

**HELWIG  
 CARBON  
 BRUSHES**

**SPEED INSTALLATION  
 INCREASE BRUSH LIFE  
 CUT MOTOR DOWN TIME  
 SLASH MOTOR MAINTENANCE**



Motors and generators are a costly investment . . . they deserve **HELWIG CARBON BRUSHES**. **HELWIG CARBON BRUSHES** cut down vibration and give better contact—eliminate uneven wear and reduce circulating current.

Brushes are manufactured to size—need not be cut down to fit commutator. It **PAYS** to protect your electrical equipment with **HELWIG CARBON BRUSHES**.

**HELWIG CARBON PRODUCTS**



**2546 N. 30th St.  
 Milwaukee 10, Wisconsin**



# **UNION** **Metallic Insulated** **GROUNDING** **BUSHINGS**



No. MIG-2

Extra wide insulated lip of impact resistant material makes wire pulling easy and provides substantial bearing surface for heavy cables. Deeply knurled, plated collar for convenient tightening. Grounding lug accommodates a wide range of cable sizes.

**UNION INSULATING CO.**  
Parkersburg, West Va.

Thomas Associates, 4607 Alger St., Los Angeles 39, Calif. (2)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2)

## **BUSHINGS, Adapter—see ADAPTERS, Conduit Bushing** **BUSHINGS**

1. Bolt
2. Bronze
3. Cable Supporting
4. Entrance
5. Hermetically Sealed
6. Insulating
7. Socket

Adaleit Mfg. Co., 14300 Lorain Ave., Cleveland 11, Ohio (3, 4, 5, 6)  
American Lava Corp., Cherokee Blvd. & Mfrs. Rd., Chattanooga 5, Tenn. (4, 5, 6)  
Bronze Bearings, Inc., 340 N. Ave., East, Cranford, N. J. (2)  
Bryant Electric Co., Box D Barnum Station, Bridgeport 2, Conn. (6)  
Bunting Brass & Bronze Co., 715 Spencer St., Toledo 1, Ohio (2)  
Cambridge Thermionic Corp., 445 Concord Ave., Cambridge 38, Mass. (5)  
Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (7)  
Continental-Diamond Fibre Co., Newark, Del. (6)  
Du-Co Ceramics Co., Main St. Extension (Box 144), Saxonburg, Pa. (5, 6)  
Duro Fittings Co., 2040 Santa Fe Ave., Los Angeles 21, Calif. (6)  
Electrical Fittings Corp., 37-50 57th St., Woodside 77, N. Y. (6)  
Federal Sign & Signal Corp., 8726 S. State St., Chicago 19, Ill. (4, 6)  
Fusite Corp., 6000 Fernview Ave., Cincinnati 13, Ohio (5)  
Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (4, 6)  
Goodyear Industrial Products Co., Inc., 18 Murray St., N. Y. N. Y. (5, 6)  
Gries Reproducer Corp., 123 Beechwood St., New Rochelle, N. Y. (6)  
Heyman Mfg. Co., Kenilworth 20, N. J. (6)  
Hodgkins Co., J. F., 140 Water St., Randolph, Gardiner, Maine (2)  
Johnson Bronze Co., 490 S. Mill St., New Castle, Pa. (2)  
Kellems Co., 15 Williams St., Stonington, Conn. (3)  
Keystone Carbon Co., Inc., 1935 State St., St. Marys, Pa. (2)  
Keystone Electronics Corp., 423 Broome St., New York 13, N. Y. (6)  
Kirchberger & Co., Inc., M., 83-91 W. Forest Ave., Englewood, N. J. (6)

Lapp Insulator Co., Inc., 35 Gilbert St., Leroy, N. Y. (4, 6)  
McKinley Co., Ben P., 626 W. Jackson Blvd., Chicago 6, Ill. (6)  
Metalectrics, Inc., 77 Broadway, N. Y. 12, N. Y. (3, 6)  
Meter Devices Co., 1001 Prospect Ave., S. W., Canton 6, Ohio (6)  
Mica Insulator Co., P. O. Box 1076, Schenectady 3, N. Y. (6)  
● **MIDWEST ELECTRIC MFG. CO.**, 1639 Walnut St., Chicago 12, Ill. (6)—ADV. PG. 104-105  
Miller Products Co., Inc., 29 Warren St., N. Y. 7, N. Y. (5, 6)  
Minerallac Electric Co., 25 N. Peoria St., Chicago 7, Ill. (6)  
National Electric Products Corp., Gateway Center, 140 Stanwix St., Pittsburgh 22, Pa. (6)  
National Lead Co., 111 Broadway, N. Y. 6, N. Y. (2)  
● **O. Z. ELECTRICAL MFG. CO., INC.**, 262 Bond St., Brooklyn 17, N. Y. (2, 3, 6)—ADV. PG. 136  
Penn Fibre & Specialty Co., Inc., 2024 E. Westmoreland St., Philadelphia 34, Pa. (6)  
Pure Carbon Co., Inc., 441 Hall Ave., St. Marys, Pa. (2)  
Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (4)  
Rattan Mfg. Co., 10 Wall St. (P. O. Box 1745), New Haven 7, Conn. (6)  
Red Seal Electric Co., 6321 Detroit Ave., Cleveland 2, Ohio (3, 6)  
Richards Co., J. R., P. O. Box 482, Carnegie, Pa. (6)  
Rodale Mfg. Co., Inc., 6th & Minor Sts., Emmaus, Pa. (3, 6)  
St. Marys Carbon Co., State St., St. Marys, Pa. (2)  
Shenango-Penn Mold Co., West Third St., Dover, Ohio (2)  
Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (5)  
Spaulding Fibre Co., Inc., 310 Wheeler St., Tona-wanda, N. Y. (3, 6)  
Star Porcelain Co., Muirhead Ave., Trenton 9, N. J. (6)  
Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (6)  
Thomas & Sons Co., R., Lisbon, Ohio (3, 4)  
Thomson Industries, Inc., Manhasset, N. Y. (7)  
Union Insulating Co., Inc., Box 351, Parkersburg, W. Va. (6)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (3)  
Wilmington Fibre Specialty Co., New Castle, Dela. (6)  
Woodward Machine Co., Lighting Div., 4833 Elm-hurst 4, Mich. (7)  
Wrought Washer Mfg. Co., 2280 S. Bay St., Milwaukee 7, Wis. (2, 6)  
Yorkville Metal Products Co., 677 Broadway, New York 12, N. Y. (6)

## **BUSHINGS, Apparatus**

1. Glass
2. High Voltage
3. Low Voltage

Cambridge Thermionic Corp., 445 Concord Ave., Cambridge 38, Mass. (2, 3)  
Centrallab Div., Globe-Union Inc., 900 E. Keefe Ave., Milwaukee 1, Wis. (2)  
Cornino Glass Works, Corning, N. Y. (1)  
Federal Sign & Signal Corp., 8726 S. State St., Chicago 19, Ill. (2, 3)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 3)  
General Electric Co., Locke Dept., P. O. Box 57, Baltimore 3, Md. (2, 3)  
Javex, P. O. Box 646, Redlands, Calif. (2)  
Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (2, 3)  
Kess Mfg. Co., F. D., P. O. Box 537, Beatrice, Neb. (2, 3)  
Knox Porcelain Corp., 2706 Mynders Ave., (P. O. Box 2031), Knoxville 1, Tenn. (2, 3)  
Lancaster Lens Co., Lancaster, Ohio (1)  
Lapp Insulator Co., Inc., 35 Gilbert St., Leroy, N. Y. (2, 3)  
Line Material Co., 700 West Michigan St., Milwaukee, Wis. (2, 3)  
Multi Electric Mfg. Inc., 4223 W. Lake St., Chicago 24, Ill. (1)  
● **PORCELAIN PRODUCTS, INC.**, P. O. Box 300, Findlay, Ohio (2)—ADV. PG. 139  
Taylor Fibre Co., Norristown, Pa. (2, 3)  
Victor Insulators Div., I-T-E Circuit Breaker Co., Victor, N. Y. (2, 3)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (3)

## **BUSHINGS, Conduit**

1. Capped
2. Grounding
3. Knockout
4. Metallic
5. Metallic, Insulated
6. Reducing

Adaleit Mfg. Co., 14300 Lorain Ave., Cleveland 11, Ohio (5)  
Alhambra Foundry Co., Ltd., 1147 Meridian Ave., Alhambra, Calif. (4)  
Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. (3, 6)  
Arrol Corp., Foot of Bower St., Montgomery, Pa. (3, 6)  
Blackhawk Industries, 250 S. Main St., Dubuque, Iowa (2, 4, 6)  
Buchanan Electrical Products Corp., 237 U. S. Route 22, Hillside, N. J. (4, 5)



# **UNION** **Insulating** **CONDUIT** **BUSHINGS**



No. CE-2

Permanently rigid under pressure and heat of 450°F. Protects wire insulation under the most severe conditions of heat and vibration. Sharp molded threads turn easily even on rough conduit threads. Convenient lugs for tightening or loosening with a screwdriver.

**UNION INSULATING CO.**  
Parkersburg, West Va.

● **CROUSE-HINDS CO.**, Syracuse 1, N. Y. (6)—ADV. PG. 104-105  
Duro Fittings Co., 2040 Santa Fe Ave., Los Angeles 21, Calif. (2, 4, 6)  
Electrical Fittings Corp., 37-50 57th St., Woodside 77, N. Y. (1, 2, 4, 5, 6)  
Federal Sign & Signal Corp., 8726 S. State St., Chicago 19, Ill. (3)  
Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (1, 2, 3, 4, 5, 6)  
General Electric Co., Locke Dept., P. O. Box 57, Baltimore 3, Md. (3, 5)  
General Steel Fittings Co., 1321 21st St., Racine, Wis. (6)  
Green, Inc., R. H., 1201 24th St., Oakland 7, Calif. (3)  
Killark Electric Mfg. Co., 3940 Easton Ave., St. Louis 13, Mo. (1, 2, 6)  
Knox Porcelain Corp., 2706 Mynders Ave. (P. O. Box 2031), Knoxville 1, Tenn. (3)  
Lint, Clyde W., 2323 W. 18 St., Chicago 8, Ill. (3)  
McKinley Co., Ben P., 626 W. Jackson Blvd., Chicago 6, Ill. (5)  
Metalectrics, Inc., 77 Broadway, N. Y. 12, N. Y. (1, 2, 3, 4, 6)  
● **MIDWEST ELECTRIC MFG. CO.**, 1639 Walnut St., Chicago 12, Ill. (1, 2, 4, 6)—ADV. PG. 104-105  
Multi Electric Mfg. Inc., 4223 W. Lake St., Chicago 24, Ill. (3, 5, 6)  
National Electric Products Corp., Gateway Center, 140 Stanwix St., Pittsburgh 22, Pa. (2)  
● **O. Z. ELECTRICAL MFG. CO., INC.**, 262 Bond St., Brooklyn 17, N. Y. (2, 3, 5)—ADV. PG. 136  
Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (1, 2, 6)  
Rattan Mfg. Co., 10 Wall St. (P. O. Box 1745), New Haven 7, Conn. (1, 2, 4)  
Richards Co., J. R., P. O. Box 482, Carnegie, Pa. (1, 2, 4, 6)  
Roller, Inc., Wm. G., 159 Liberty Ave., Mineola, N. Y. (1, 2, 3, 4, 6)  
Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa. (1, 2, 3, 4, 6)  
Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (1, 2, 3, 4, 5, 6)  
Taylor Fibre Co., Norristown, Pa. (5)  
Thepitt Mfg. Co., Gregg & Hammond Sts., Carnegie, Pa. (1, 2, 6)  
Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J. (1, 2, 3, 5, 6)  
Tomic Sales & Engineering Co., 20000 Sherwood Ave., Detroit 34, Mich. (6)  
Union Insulating Co., Inc., Box 351, Parkersburg, W. Va. (2, 5)  
Victor Insulators Div., I-T-E Circuit Breaker Co., Victor, N. Y. (2, 3)  
Woodward Machine Co., Lighting Div., 4833 Elm-hurst, Detroit 4, Mich. (4)

Wrought Washer Mfg. Co., 2280 S. Bay St., Milwaukee 7, Wis. (4)  
Yorkville Metal Products Co., 677 Broadway, N. Y. 12, N. Y. (6)

#### BUSHINGS, Misc.

Adapter—see ADAPTERS, Conduit Bushing  
Armored Cable—see FITTINGS, Cable, Armored  
Locking—see FITTINGS, Conduit, Rigid  
Plastic—see FITTINGS, Insulator  
Rubber—see FITTINGS, Insulator

#### BUSWAYS

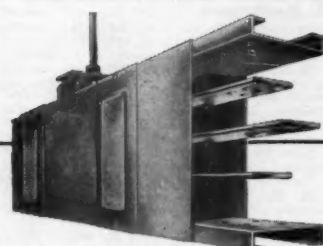
BullDog Electric Products Co., 7610 Joseph Campau, Detroit, Mich.  
Continental Electric Equipment Co., Box 1055, Cincinnati 1, Ohio  
Empire Switchboard Co., Inc., 810 Fourth Ave., Brooklyn 32, N. Y.  
Federal Pacific Electric Co., 50 Paris St., Newark 5, N. J.  
● GRAYBAR ELECTRIC CO., INC., 420 Lexington Ave., N. Y. 17, N. Y.—ADV. PG. 2  
Gustavson, Inc., 8600 Chestnut St., Kansas City 30, Mo.  
Multi Electric Mfg. Inc., 4223 W. Lake St., Chicago 24, Ill.  
National Electric Products Corp., Gateway Center, 140 Stanwix St., Pittsburgh 22, Pa.  
Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa.  
Royal Switchboard Co., Inc., 460 Driggs Ave., Brooklyn 11, N. Y.  
Square D Co., 6060 Rivard St., Detroit 11, Mich.  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.  
● WESTINGHOUSE ELECTRICAL SUPPLY CO., 40 Wall St., New York 5, N. Y.—ADV. PG. SECOND COVER

#### BUSWAYS, Trolley

BullDog Electric Products Co., 7610 Joseph Campau, Detroit, Mich.  
Federal Pacific Electric Co., 50 Paris St., Newark 5, N. J.  
Feedrail Corp., 125 Barclay St., N. Y. 7, N. Y.  
General Electric Co., Distribution Assemblies Dept., 41 Woodford Ave., Plainville, Conn.  
● INSUL-8- CORP., 1285 Rollins Rd., Burlingame, Calif.—ADV. PG. 130

#### BUTTONS, Luminous

Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I.



### THE BUS DUCT EASIEST TO INSTALL

IN ADDITION, this modern Federal Pacific distribution system provides top maintenance economy, operational ease, safety and efficiency. Plug in outlets every foot.

Elbows, tees, cross-overs, reducers, etc., permit layout that meets every distribution problem. Low Impedance Duct for long feeder runs.

Write for full details or see your Federal Newark distributor.

## FEDERAL PACIFIC ELECTRIC COMPANY

FORMERLY FEDERAL ELECTRIC  
PRODUCTS COMPANY

50 PARIS STREET • NEWARK 1, N. J.

★ EFFICIENT  
★ ECONOMICAL  
★ FLEXIBLE



FEEDER  
and  
POWER  
PLUG-IN

## BUSDUCT

Available in three types — ① Powerplug-in, 250 to 1000 amps., 600 Volts, Midget ② Powerplugin 100 amp., 2, 3 and 4 conductors, 250 Volts, and ③ HE Feeder Busduct, 800 to 4,000 amps., 2, 3 and 4 conductor design, 600 Volts maximum. ④ Wire and Cable duct is also available for wire and cable distribution.

① Busduct is the modern system of power distribution from service entrance to machine. Built in standard 10 foot lengths, it can be arranged to fit almost any electrical distribution requirement. It enables quick changes in plant or structural layout without interrupting production, eliminates long lead-ins and temporary connections and affords savings by reducing power loss and voltage drop.

*Frank Adam Electric Co.*

MAIN P. O. BOX 337 - ST. LOUIS 3, MO.

#### BUTTONS, Push

1. Floor and Attachment
2. Flush
3. Industrial
4. Pendant
5. Momentary Contact
6. Surface

Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee 4, Wis. (2, 3, 4, 5, 6)  
Auth Electric Co., Inc., 34-20 45th St., L. I. C. 1, N. Y. (1, 2, 3, 4, 5, 6)  
Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (3)  
Bryant Electric Co., Box D., Barnum Station, Bridgeport 2, Conn. (2)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (1, 2, 5, 6)  
Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (2, 4, 5, 6)  
Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (1, 2, 3, 4, 5, 6)  
Cooper Hewitt Electric Co., 720-732 Grand St., Hoboken, N. J. (1, 2, 3, 4, 5, 6)  
Couch Co., Inc., S. H., 3 Arlington St., North Quincy 71, Mass. (2)  
CraneVevey Corp., 1240 S. Boyle Ave., Los Angeles 23, Calif. (4)

● CROUSE-HINDS CO., Syracuse 1, N. Y. (3)—ADV. PG. 116-117  
Curler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (3, 5)  
Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (2, 4, 6)  
Edwards Co., Inc., Norwalk, Conn. (1, 2, 3, 4, 5, 6)  
Euclid Electric & Mfg. Co., 50, Edwards St., Madison, Ohio (3, 4, 5, 6)  
Federal Pacific Electric Co., 50 Paris St., Newark 5, N. J. (2, 3, 5, 6)  
Furnas Electric Co., 1067 McKee St., Batavia, Ill. (2, 3, 4, 5, 6)  
Gem Electric Mfg. Co., Inc., 237 37th St., Brooklyn, N. Y. (2, 6)  
General Control Co., 1200 Soldiers Field Rd., Boston 34, Mass. (2, 3, 5)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (3)  
Lee Electric, Inc., 132 Backwith Ave., Paterson, N. J. (2, 6)  
Liberty Bell Mfg. Co., Inc., Short St., Minerva, Ohio (2, 6)  
Lindell Electric Control Corp., 34 Canal St., New York 13, N. Y. (3)  
National Acme Co., Electrical Mfg. Div., 170 E. 131 St., Cleveland 8, Ohio (2, 3, 6)  
Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla. (3, 5)  
Partrick & Wilkins Co., 51 N. Seventh St., Phila. 6, Pa. (1, 2, 3, 4, 5, 6)

### Push-button Stations



Push-button stations and units, CR-2940, CR2941, CR2943, used in control circuits or magnetic contactors and starters for starting and stopping motors, controlling solenoids, or initiating action of any kind. Contact mechanism mounted in suitable enclosure for service required. Enclosure selection includes, (1) General-purpose for ordinary applications, (2) Dust-tight and watertight for outdoor applications and dusty atmospheres, (3) Explosion-proof where explosion hazards are present, (4) Oiltight units suitable where push button can be mounted on panel of machine. 600 volts maximum.

Consult classified section of phone book for address of nearest G-E Apparatus Agent-Distributor, or write direct to General Electric Co., Section 640-396M, Schenectady 5, N. Y.

GENERAL ELECTRIC



## PRODUCT DIRECTORY

Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (5)  
 Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (3)  
 Rodale Mfg. Co., Inc., 6th & Minor Sts., Emmaus, Pa. (2, 4, 6)  
 Rowan Controller Co., 2315 Harwood Ave., Baltimore 18, Md. (3, 5)  
**● RUSSELL & STOLL CO., INC.**, 125 Barclay St., New York 7, N. Y. (3, 5, 6)—ADV. PG. THIRD COVER  
 Square D Co., 6060 Rivard St., Detroit 11, Mich. (1, 2, 3, 4, 5, 6)  
 Trine Mfg. Corp., 1430 Ferris Place, New York 61, N. Y. (1, 2, 3, 4, 5, 6)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2, 3, 4, 5, 6)

**BUTTONS, Flasher**—see **FLASHERS, Thermal**

### BUZZERS

1. Line Voltage
2. Low Voltage
3. Watchcase

Auth Electric Co., Inc., 34-20 45th St., L. I. C. 1, N. Y. (1, 2, 3)  
 Benjamin Electric Mfg. Co., Northwest Highway & Seepers Rd., Des Plaines, Ill. (1)  
 Cable Electric Products, Inc., 234 Daboli St., Providence 7, R. I. (2)  
 Cooper Hewitt Electric Co., 720-732 Grand St., Hoboken, N. J. (1, 2, 3)  
 Couch Co., Inc., S. N., 3 Arlington St., North Quincy 71, Mass. (1, 2, 3)  
 Edwards Co., Inc., Norwalk, Conn. (1, 2)  
 Federal Sign & Signal Corp., 8726 S. State St., Chicago 19, Ill. (1)  
 Fleron & Son, M. M., 113 N. Broad St., Trenton 8, N. J. (2)  
 Lee Electric, Inc., 132 Beckwith Ave., Paterson, N. J. (1, 2)  
 Leviton Mfg. Co., Inc., 236 Greenpoint Ave., Brooklyn 22, N. Y. (2)  
 Liberty Bell Mfg. Co., Inc., Short St., Minerva, Ohio (2)  
 Line Electric Co., 131 Ogden St., Newark 4, N. J. (1, 2)  
 National Time & Signal Corp., 21800 Wyoming Ave., Detroit 37, Mich. (1, 2)  
 Partridge & Wilkins Co., 51 N. Seventh St., Phila. 6, Pa. (1, 2, 3)  
 Rodale Mfg. Co., Inc., 6th & Minor Sts., Emmaus, Pa. (2)  
 Sperti Faraday, Inc., 1322 E. Church St., Adrian, Mich. (1, 2)  
 Standard Electric Time Co., 129 Logan St., Springfield, Mass. (1, 2)

**BUZZERS, Misc.**

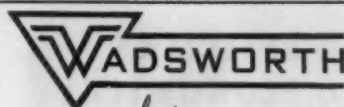
**Battery**—see **BUZZERS, Low Voltage**  
**Combined with Bells**—see **BELLS, Combined with Buzzers**  
**Hazardous Location**—see **BELLS, Hazardous Location**

## C

### CABINETS

1. Fuse
2. Meter
3. Panelboard
4. Switch
5. Telephone
6. Transformer

Adam Electric Co., Frank, P. O. Box 357, St. Louis, Mo. (1, 2, 3, 4, 5)  
 American Electric Switch Div., Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (1, 6)  
 Associated Lighting Service, 876 Kayne St., Redwood City, Calif. (3, 4, 6)  
 Auth Electric Co., Inc., 34-20 45th St., L. I. C. 1, N. Y. (5, 6)  
 Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland 10, Ohio (2, 3)  
 Barber-Colman Co., P. O. Drawer 99, 1300 Rock St., Rockford, Ill. (3)  
 Barber Electric Mfg. Co., Inc., 30 Chestnut St., N. Attleboro, Mass. (1, 2, 3, 4, 5, 6)  
 Bonnell Electric Mfg. Co., Inc., 192-194 Chambers St., N. Y. 7, N. Y. (1, 3, 4)  
 Broch Mfg. Corp., 200 Central Ave., Newark, N. J. (3)  
 Burns Co., James F., 705-715 Cherry St., Phila. 6, Pa. (1, 2, 3, 4, 5, 6)  
 Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (1, 3, 4)  
 Cleveland Switchboard Co., 2925 E. 79 St., Cleveland 4, Ohio (3, 4, 5, 6)  
 Code Products Corp., 214 Kalos St., Phila. 28, Pa. (2)  
 Columbia Metal Box Co., 260 E. 143 St., N. Y. 51, N. Y. (3, 5, 6)  
 Continental Electric Equipment Co., Box 1055, Cincinnati 1, Ohio (1, 3, 5, 6)  
 Eastern Specialty Co., 3617 N. 8th St., Phila. 40, Pa. (2, 6)  
 Electric Service Engineering Co., 10 Third Ave., Joliet, Ill. (3)  
 Empire Switchboard Co., Inc., 810 Fourth Ave., Brooklyn 32, N. Y. (3, 5, 6)  
 Falstrom Co., 62 Falstrom Court, Passaic, N. J. (3)  
 Federal Pacific Electric Co., 50 Paris St., Newark 5, N. J. (1, 2, 3, 4, 5, 6)  
 General Electric Co., Distribution Assemblies Dept., 41 Woodford Ave., Plainville, Conn. (3)



*first in*  
**SERVICE EQUIPMENT**  
 A DEVICE FOR EVERY NEED  
 30 to 200 AMP



PANELBOARDS - CIRCUIT BREAKERS - WIRING TROUGHS

*new* **KNIFE SAFETY "ACC"**  
 30 to 600 AMP



**The WADSWORTH ELECTRIC MFG. CO. INC.**  
 Covington, Kentucky  
**WRITE FOR FREE CATALOG**

General Switch Corp., 45 Roebling St., Brooklyn 11, N. Y. (1, 3, 4)  
 Gustavson, Inc., 8600 Chestnut St., Kansas City 30, Mo. (2, 3)  
 Haertel Co., Walter, 2840 4th Ave. So., Minneapolis, Minn. (3)  
 Hoffman Engineering Corp., Anoka, Minn. (1, 3, 4, 6)  
 Hope Electrical Products Co., Inc., 338 Wilson Ave., Newark 5, N. Y. (1, 4)  
 Huenefeld Co., Engineered Products Div., 2701 Spring Grove Ave., Cincinnati 25, Ohio (4, 5, 6)  
 Karp Metal Products Co., 233 63rd St., Brooklyn 20, N. Y. (3, 4)  
 Kees Mfg. Co., F. D., P. O. Box 537, Beatrice, Neb. (2, 4, 6)  
 Keystone Mfg. Co., 23328 Sherwood Rd., Centerline, Detroit, Mich. (1, 3, 5, 6)  
 Kinney Electrical Mfg. Co., 678 Buckeye St., Elgin, Ill. (3)  
 Kirk & Blum Mfg. Co., 3120 Forrer St., Cincinnati 9, Ohio (3)  
 Kolton Electric Mfg. Co., 123 New Jersey Railroad Ave., Newark 5, N. J. (1, 3, 5, 6)  
 Littleford Bros., Inc., 453 E. Pearl St., Cincinnati 2, Ohio (3)  
 Meco Metal Box & Panel Mfg. Co., Inc., 2522 W. Huntington St., Phila. 32, Pa. (1, 2, 5, 6)  
 Meter Devices Co., 1001 Prospect Ave. S. W., Canton 6, Ohio (2, 4, 6)  
 Midwest Electric Products, Inc., 1515 N. Front St., Mankato, Minn. (1, 6)  
 Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 6, Minn. (3)  
 Mullenbach Div., Electric Machinery Mfg. Co., 2300 E. 27 St., Los Angeles 58, Calif.  
 Murray Mfg. Corp., 1250 Atlantic Ave., Brooklyn 16, N. Y. (1, 2, 3, 4, 6)  
 Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla. (1, 2, 3, 4)  
 Overly-Hautz Co., 11500 Madison Ave., Cleveland 2, Ohio (3, 6)  
 Parter Electrical Mfg. Co., 221 Washington St., Oakland 7, Calif. (1, 2, 3, 4, 5, 6)  
 Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (1, 2, 3, 4, 5, 6)  
 Penn-Union Electric Corp., 313 State St., Erie, Pa. (2)  
 Queen Products Co., Inc., Thirteenth & Rowan Sts., Louisville 3, Ky. (1, 3, 4, 5, 6)  
 Robb & Blackmer, 129 Pearl St., Boston 10, Mass. (1, 2, 6)  
 Royal Switchboard Co., Inc., 460 Driggs Ave., Brooklyn 11, N. Y. (1, 2, 3, 4, 5, 6)  
 S & C Electric Co., 4435 Ravenswood Ave., Chicago 40, Ill. (1, 4)  
 Seom Instrument Corp., 3909 Irving Park Rd., Chicago 18, Ill. (3)

Southern Electrical Equipment Co., 308 W. Bland St., Charlotte 3, N. C. (4)  
 Square D Co., 6060 Rivard St., Detroit 11, Mich. (1, 2, 3, 4, 5, 6)  
 States Co., 19 New Park Ave., Hartford 6, Conn. (2)  
 Sun Electric Products, Inc., 28 S. Day St., Orange, N. J. (1, 3, 5, 6)  
 Wadsworth Electric Mfg. Co., Inc., 20-34 W. 11th St. (Box 272), Covington, Ky. (1, 3, 4, 6)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 3, 4)

### CABINETS, Medicine, with Lights or Outlets

Carey Mfg. Co., Philip, Cincinnati 15, Ohio  
 Columbia Metal Box Co., 260 E. 143 St., N. Y. 51, N. Y.  
 Dura Steel Products Co., 1774 E. 21 St., Los Angeles 58, Calif.  
 Farley Mfg. Co., 1060 E. Grand Ave., Decatur, Ill.  
 General Cabinet Corp., 1809 W. Thomas St., Chicago 22, Ill.  
 Northern Light Co., 1661 N. Water St., Milwaukee 2, Wis.  
 Ohio Window Glass Co., 4045 St. Clair Ave., Cleveland 14, Ohio  
 Parker Co., Charles, 50 Hanover St., Meriden, Conn.  
 Standard Steel Cabinet Co., 3701-15 Milwaukee Ave., Chicago 41, Ill.  
 United Metal Cabinet Corp., 168-186 Seventh St., Brooklyn 15, N. Y.

### CABINETS, Misc.

**Cutout**—see **CABINETS, Fuse**  
**Distribution**—see **CABINETS, Panelboard**

### CABLE (Classified as to Composition)

1. Aluminum
2. Armored, Basket Weave
3. Armored, Flexible Steel
4. Asbestos
5. Asbestos Braid
6. Co-Axial
7. Concentric
8. Copper, Bare
9. Lead-Sheathed
10. Lead-Sheathed, Armored
11. Neoprene-Jacketed
12. Non-Metallic Sheathed
13. Paper-Insulated
14. Rubber-Covered
15. Rubber-Covered, Braided
16. Self-Supporting
17. Steel Strand
18. Thermoplastic
19. Varnished Cambric, Braided
20. Varnished Cambric, Lead-Sheathed
21. Weatherproof

Alden Products Co., 117 N. Main St., Brockton, Mass. (2, 5, 6, 7, 12, 15, 19, 21)  
 Alpha Wire Corp., 430 Broadway, N. Y. 13, N. Y. (6, 8, 9, 11, 14, 15, 18, 21)  
 Alphadux Wire & Cable Co., Ford Ave. (Box 67), Milltown, N. J. (11, 12, 18)  
 Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa. (1, 16, 21)  
 American Brass Co., 414 Meadow St., Waterbury 20, Conn. (8)  
 American Insulated Wire Corp., 36 Freeman St., Pawtucket, R. I. (3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21)  
 American Metal Moulding Co., 146 Coit St., Irvington, N. J. (10)  
 American Phenolic Corp., 1830 S. 54 St., Chicago 50, Ill. (6, 8)

### ● AMERICAN STEEL & WIRE DIV., UNITED STATES STEEL CORP., Rockefeller Bldg., Cleveland 13, Ohio (1 through 11, 13 through 21)—ADV. PG. 93, 94, 95, 96

Anacordia Wire & Cable Co., 25 Broadway, New York 4, N. Y. (1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21)  
 Andrew Corp., 363 E. 75 St., Chicago 19, Ill. (6)  
 Ansonia Wire & Cable Co., 63 Main St., Ansonia, Conn. (18)  
 Berkshire Electric Cable Co., Leeds, Mass. (6, 8, 18)  
 Bethlehem Steel Co., Bethlehem, Pa. (17)  
 Brand & Co., Inc., William, North & Valley Sts., Willimantic, Conn. (6, 7, 18)  
 Cable Electric Products, Inc., 234 Daboli St., Providence 7, R. I. (5, 14, 15, 18)  
 Carol Cable Co., 190 Middle St., Pawtucket, R. I. (6, 11, 13, 14, 21)  
 Chase Brass & Copper Co., Inc., 236 Grand St., Waterbury 20, Conn. (1, 8, 13, 19, 20, 21)  
 Chester Cable Corp., Oakland Ave., Chester, N. Y. (3, 6, 10, 12, 18, 21)  
 Circle Wire and Cable Corp., 5500 Masopeth Ave., Masopeth, L. I., N. Y. (2, 3, 7, 8, 9, 10, 11, 12, 13, 14, 15, 18, 19, 20, 21)

### ● CLIFTON CONDUIT CO. INC., 755 Montgomery St., Jersey City 2, N. J. (3, 12, 15, 18, 21)—ADV. PG. 115

Collyer Insulated Wire Co., 249 Roosevelt Ave., Pawtucket, R. I. (2, 4, 5, 7, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21)  
 Columbia Cable & Electric Corp., 255 Chestnut St., Brooklyn 8, N. Y. (3, 10, 12)  
 Columbia Wire & Supply Co., 2850 Irving Park Rd., Chicago 19, Ill. (1, 4, 5, 6, 11, 14, 15, 18, 21)  
 Copperweld Steel Co., Wire and Cable Div., Glassport, Pa. (8, 16, 21)  
 Cornish Wire Co., Inc., 50 Church St., N. Y. 7, N. Y. (4, 5, 6, 8, 11, 14, 15, 18)  
 Diamond Wire & Cable Co., 445 Park Ave., Syracuse, Ill. (8, 11, 12, 13, 14, 15, 18, 21)

Etco Wire & Cable Corp., 75 Onderdonk Ave., Brooklyn 37, N. Y. (18)  
Federal Telephone and Radio Co., 100 Kingsland Rd., Clifton, N. J. (2, 6)  
Fidelity Machine Co., Inc., 3908 Frankford Ave., Phila. 24, Pa. (12, 21)  
●GENERAL CABLE CORP., 420 Lexington Ave., N. Y. 17, N. Y. (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21)—ADV. PG. 58  
●GENERAL ELECTRIC CO., CONSTRUCTION MATERIALS DIV., 1285 Boston Ave., Bridgeport 2, Conn. (2, 3, 4, 5, 9, 10, 11, 12, 14, 15, 16, 18, 19, 20)—ADV. PG. FOURTH COVER  
General Insulated Wire Works, Inc., 69 Gordon Ave., Providence 5, R. I. (6, 11, 14, 18)  
General Radio Co., 275 Massachusetts Ave., Cambridge 39, Mass. (6)  
●GRAYBAR ELECTRIC CO., INC., 420 Lexington Ave., N. Y. 17, N. Y. (14)—ADV. PG. 2  
Hatfield Wire and Cable Div., Continental Copper & Steel Indus., Inc., 487 Hillside Ave., Hillside 5, N. J. (3, 4, 5, 7, 8, 9, 10, 11, 12, 14, 15, 18, 21)  
Hitamp Wires, Inc., 26 Windsor Rd., Mineola, L. I., N. Y. (6)  
Jerrold Electronics Corp., 26th & Dickinson Sts., Chicago 6, Ill. (17)  
Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (17)  
Kennecott Wire and Cable Co., Phillipsdale (Rumford 16), R. I. (7, 8, 9, 10, 11, 13, 19, 20, 21)  
Lowell Insulated Wire Div., Overlakes Corp., 171 Lincoln St., Lowell, Mass. (11, 14, 18)  
MacWhyrte Co., 2901 14th Ave., Kenosha, Wis. (17)  
Miller Electric Co., 120 Main St., Pawtucket, R. I. (4, 18)  
National Carbon Co., 30 E. 42 St., N. Y. 17, N. Y. (1, 2)  
National Electric Products Corp., Gateway Center, 140 Stanwix St., Pittsburgh 22, Pa. (1, 2, 3, 4, 5, 7, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21)  
Nehring Electrical Works, 9th & Locust St., Dekalb, Ill. (1, 6, 8, 18, 21)  
New England Electrical Works, Inc., 365 Main St., Lisbon, N. H. (8, 12)  
●OKONITE CO., Passaic, N. J. (1 through 21)—ADV. PG. 137  
Packard Electric Div., General Motors Corp., Warren, Ohio (14, 15, 18)  
Phola Plastics Corp., 25 Foster St., Worcester 8, Mass. (18)  
●PHELPS DODGE COPPER PRODUCTS CORP., 40 Wall St., New York 5, N. Y. (3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21)—ADV. PG. 98-99  
Pastic Wire & Cable Corp., E. Main St., Jewett City, Conn. (6, 7, 12, 16, 18)  
Plastoid Corp., 42-61 24th St., L. I. C. 1, N. Y. (6, 18, 21)  
Precision Tube Co., Inc., Church Rd. & Wissahicken Ave., North Wales, Pa. (6)  
Progressive Machine Works, 1629 N. Front St., Reading, Pa. (3)  
Reynolds Metals Co., 2500 S. 3rd St., Louisville 1, Ky. (1, 11, 16, 21)  
Rhode Island Insulated Wire Co., Inc., 50 Burnham Ave., Cranston, R. I. (4, 5, 6, 12, 18, 19)  
Rockbestos Products Corp., Nicoll and Cammer Sts., New Haven 4, Conn. (4, 5, 6, 9, 10, 18, 19, 20)  
Roebeling's Sons Corp., John A., 640 S. Broad St., Trenton 2, N. J. (1, 2, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21)  
●ROME CABLE CORP., Ridge St., Rome, N. Y. (1, 6, 7, 8, 9, 11, 12, 14, 15, 16, 18, 21)—ADV. PG. 122-123  
Royal Electric Co., Inc., 95 Grand Ave., Pawtucket, R. I. (4, 5, 11, 14, 15, 18, 21)  
●SIMPLEX WIRE & CABLE CO., 79 Sidney St., Cambridge 39, Mass. (2, 3, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20)—ADV. PG. 142  
Southern Electrical Corp., P. O. Box 989, Chattanooga 5, Tenn. (1, 8, 16, 17, 21)  
Southwire Co., Carrollton, Ga. (1, 8, 17, 18, 21)  
Surprenant Mfg. Co., 199 Washington St., Boston 8, Mass. (18)  
Touch-Plate Mfg. Corp., 16530 Garfield, Paramount, Calif. (18)  
Triangle Conduit & Cable Co., Inc., Triangle & Jersey Aves., New Brunswick, N. J. (1, 3, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21)  
Triple-A Specialty Co., 2101 Walnut St., Chicago 12, Ill. (11)  
●UNITED STATES RUBBER CO., ELECTRICAL WIRE AND CABLE DEPT., 1230 Avenue of the Americas, New York 20, N. Y. (1, 6, 8, 9, 11, 12, 14, 15, 16, 18, 21)—ADV. PG. 144  
United States Rubber Co., Mechanical Goods Div., 1230 Avenue of the Americas, New York 20, N. Y. (2, 3, 4, 6, 9, 10, 11, 12, 14, 15, 16, 18, 21)  
Walker Brothers, End St., Conshohocken, Pa. (1, 2, 9, 11, 12, 14, 15, 18, 21)  
Western Insulated Wire Co., 2425 E. 30th St., Los Angeles 58, Calif. (4, 5, 11, 14, 15)  
Whitney Blake Co., 1565 Dixwell Ave., Hamden, Conn. (6, 11, 14, 15, 16, 18, 21)

CABLE (Classified as to Usage)

1. Battery Charging
2. Borderlight
3. Bus Drop
4. Control
5. Control, Flexible
6. Elevator
7. Gas-Tube Sign

8. Heating
9. High Frequency
10. Ignition
11. Ignition, Oil Burner
12. Locomotive
13. Mining Machine
14. Motor Lead
15. Network
16. Park, Armored
17. Power, Portable
18. Service Drop
19. Service Entrance
20. Service Entrance, Armored
21. Stage
22. Submarine
23. Submarine, Armored
24. Telephone, Aerial
25. Telephone, Submarine, Armored
26. Thermostat
27. Tree
28. Welding

Aiden Products Co., 117 N. Main St., Brockton, Mass. (1 through 28)  
Alpha Wire Corp., 430 Broadway, N. Y. 13, N. Y. (4, 5, 9, 10, 14, 24, 26)  
Alphaduct Wire & Cable Co., Ford Ave., (Box 67), Milltown, N. J. (26)  
Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa. (3, 18)  
American Insulated Wire Corp., 36 Freeman St., Pawtucket, R. I. (4, 5, 6, 14, 16, 17, 18, 19, 20, 21, 24, 26, 27)  
American Phenolic Corp., 1830 S. 54th St., Chicago 50, Ill. (9)  
●AMERICAN STEEL & WIRE DIV., UNITED STATES STEEL CORP., Rockefeller Bldg., Cleveland 13, Ohio (1, 2, 3, 4, 5, 6, 8, 9, 12 through 28)—ADV. PG. 93, 94, 95, 96  
Anaconda Wire & Cable Co., 25 Broadway, New York 4, N. Y. (2, 3, 4, 5, 7 through 26, 28)  
Andrew Corp., 363 E. 75 St., Chicago 19, Ill. (9)  
Ansonia Wire and Cable Co., 63 Main St., Ansonia, Conn. (4, 16, 18, 22, 23, 24, 25)  
Barber-Colman Co., P. O. Drawer 99, 1300 Rock St., Rockford, Ill. (26)  
Beckley Electric Co., Inc., 468-470 Grand Ave., Brooklyn 38, N. Y. (1, 8, 14, 17)  
Belden Mfg. Co., 4647 W. Van Buren St., Chicago 44, Ill. (10, 14, 17, 26, 28)  
Berkshire Electric Cable Co., Leeds, Mass. (4, 10, 14, 26)  
Bethlehem Steel Co., Bethlehem, Pa. (6)  
Biacco Mfg. Co., 6541 Euclid Ave., Cleveland 3, Ohio (5)  
Brand & Co., Inc., William, North & Valley St., Willimantic, Conn. (7, 9, 11, 14, 26)  
Buda Co., 145 & Commercial Ave., Harvey, Ill. (1, 2, 4)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (17)  
Capitol Stage Lighting Co., Inc., 527 W. 45 St., New York 36, N. Y. (2, 21)  
Carol Cable Co., 190 Middle St., Pawtucket, R. I. (6, 10, 17, 28)  
Champion Cable Co., 1805 E. 40 St., Cleveland 3, Ohio (10)  
Chase Brass & Copper Co., Inc., 236 Grand St., Waterbury 20, Conn. (24)  
Chester Cable Corp., Oakland Ave., Chester, N. Y. (4, 5, 7, 8, 9, 11, 13, 14, 24, 26, 27)  
Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (6, 14, 20, 27, 28)  
Circle Wire and Cable Corp., 5500 Maspeth Ave., Maspeth, L. I., N. Y. (3, 4, 13, 16, 17, 18, 19, 20, 26)  
●CLIFTON CONDUIT CO., INC., 75 Montgomery St., Jersey City 2, N. J. (18, 19)—ADV. PG. 115  
Collyer Insulated Wire Co., 249 Roosevelt Ave., Pawtucket, R. I. (3, 4, 5, 6, 12, 13, 14, 15, 17, 18, 19, 20, 27, 28)  
Columbia Wire & Supply Co., 2850 Irving Park Rd., Chicago 18, Ill. (1, 4, 5, 7, 8, 9, 10, 17, 19, 24, 26, 28)  
Connecticut Hard Rubber Co., Box 1911, New Haven 9, Conn. (8)  
Continental Wire Corp., York, Pa. (4, 5, 12, 13, 14, 26)  
Copperweld Steel Co., Wire and Cable Div., Glassport, Pa. (18)  
Cornish Wire Co., Inc., 50 Church St., N. Y. 7, N. Y. (3, 14, 17, 26, 28)  
Diamond Wire & Cable Co., 445 Park Ave., Syracuse, Ill. (4, 5, 17, 19, 20, 24, 26, 27, 28)  
Electromode Corp., 45 Crouch St., Rochester 3, N. Y. (8)  
Englehard Inc., Charles, 850 Passaic Ave., East Newark, N. J. (26)  
Etco Wire & Cable Corp., 75 Onderdonk Ave., Brooklyn 37, N. Y. (18, 19, 20, 26)  
Everwarm, Inc., 2717½ N. Central Ave., North Knoxville, Tenn. (8)  
Federal Telephone and Radio Co., 100 Kingsland Rd., Clifton, N. J. (9)  
●GENERAL CABLE CORP., 420 Lexington Ave., N. Y. 17, N. Y. (1, 3, 4, 5, 6, 7, 9 through 23)—ADV. PG. 58  
●GENERAL ELECTRIC CO., CONSTRUCTION MATERIALS DIV., 1285 Boston Ave., Bridgeport 2, Conn. (3, 4, 5, 7, 8, 12, 13, 14, 16, 17, 18, 19, 20, 26, 28)—ADV. PG. FOURTH COVER  
General Insulated Wire Works, Inc., 69 Gordon Ave., Providence 5, R. I. (5, 17)  
Hatfield Wire and Cable Div., Continental Copper & Steel Indus., Inc., 487 Hillside Ave., Hillside 5, N. J. (1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 26, 28)  
Hitamp Wires, Inc., 26 Windsor Rd., Mineola, L. I., N. Y. (10, 14)

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quality Wire, Cable and Conduit



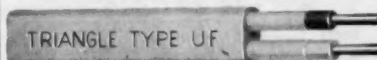
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Service Entrance Cable—Types ABN and UBN



Rubber and Lead Cable—Types RL, RPL and RHL

# TRIANGLE

CONDUIT & CABLE CO., INC.



## PRODUCT DIRECTORY

Hobart Bros., Hobart Square, Troy 1, Ohio (28)  
Hub Electric Co., 2255 W. Grand Ave., Chicago 12, Ill. (21)  
Jerrold Electronics Corp., 26th & Dickinson Sts., Phila. 46, Pa. (9)  
Kennecott Wire and Cable Co., Phillipsdale (Rumford 16), R. I. (25)  
Kriegel Bros. Universal Stage Lighting Co. Inc., 321 W. 90 St., N. Y. 19, N. Y. (21)  
Langevin Mfg. Corp., 37 W. 65 St., N. Y. 23, N. Y. (4, 5)  
Linde Air Products Co., 30 E. 42 St., N. Y. 17, N. Y. (28)  
Lowell Insulated Wire Div., Overlakes Corp., 171 Lincoln St., Lowell, Mass. (24, 26)  
Miller Electric Co., 120 Main St., Pawtucket, R. I. (26)  
Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn. (26)  
Murray Co. Inc., D. A., 632 N. Mill St., Tipton, Ind. (17)  
National Electric Products Corp., Gateway Center, 140 Stanwix St., Pittsburgh 22, Pa. (3, 4, 5, 12, 13, 14, 15, 16, 17, 18, 20, 22, 23, 25, 28)  
Nehring Electrical Works, 9th & Locust Sts., Dekalb, Ill. (18)  
New England Electrical Works, Inc., 365 Main St., Lisbon, N. H. (9, 14)  
● **OKONITE CO.**, Passaic, N. J. (1 through 28)—ADV. PG. 137  
Packard Electric Div., General Motors Corp., Warren, Ohio (1, 10, 11, 14)  
Paranite Wire & Cable Div., Essex Wire Corp., 1601 Wall St., Fort Wayne 6, Ind. (4, 5, 6, 7, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21)  
Phalo Plastics Corp., 25 Foster St., Worcester 8, Mass. (1)  
● **PHELPS DODGE COPPER PRODUCTS CORP.**, 40 Wall St., New York 5, N. Y. (3, 4, 7, 9, 11, 12, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 27, 28)—ADV. PG. 98-99  
Plastic Wire & Cable Corp., E. Main St., Jewett City, Conn. (3, 4, 5, 6, 7, 9, 10, 11, 14, 15, 17, 24, 26, 28)  
Plastoid Corp., 42-61 24th St., L. I. C. 1, N. Y. 17, N. Y. (9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21)  
Protectowire Co., P. O. Box 0, Hanover, Mass. (26)  
Radix Wire Co., 26260 Lakeland Blvd., Cleveland 32, Ohio (26)  
Reynolds Metals Co., 2500 S. 3rd St., Louisville 1, Ky. (18)  
Rhode Island Insulated Wire Co., Inc., 50 Burnham Ave., Cranston, R. I. (26)  
Roberson Co., L. N., 1539 E. 103 St., Seattle 5, Wash. (8)  
Rockbestos Products Corp., Nicoll and Canner Sts., New Haven 4, Conn. (4, 5, 8, 9, 12, 13, 14, 15, 26)  
Roebeling's Sons Corp., John A., 640 S. Broad St., Trenton 2, N. J. (3, 4, 5, 6, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28)  
● **ROME CABLE CORP.**, Ridge St., Rome, N. Y. (4, 5, 6, 12, 13, 14, 15, 17, 18, 19, 27, 28)—ADV. PG. 122-123  
Royal Electric Co. Inc., 95 Grand Ave., Pawtucket, R. I. (5, 7, 8, 10, 11, 13, 14, 17, 26, 28)  
Sequela Process Corp., 871 Willow St. (P. O. Box 1007), Redwood City, Calif. (4)  
● **SIMPLEX WIRE & CABLE CO.**, 79 Sidney St., Cambridge 39, Mass. (1, 2, 4, 5, 7, 9, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 25, 27, 28)—ADV. PG. 142  
Southern Electrical Corp., P. O. Box 989, Chattanooga 5, Tenn. (18)  
Touch-Plate Mfg. Corp., 16530 Garfield, Paramount, Calif. (4)  
Triangle Conduit & Cable Co., Inc., Triangle & Jersey Aves., New Brunswick, N. J. (4, 5, 16, 18, 19, 20, 27)  
Triple-A Specialty Co., 2101 Walnut St., Chicago 12, Ill. (1, 10)  
● **UNITED STATES RUBBER CO., ELECTRICAL WIRE AND CABLE DEPT.**, 1230 Avenue of the Americas, New York 20, N. Y. (1, 2, 3, 4, 5, 6, 13, 14, 15, 17, 18, 19, 22, 26, 27, 28)—ADV. PG. 144  
United States Rubber Co., Mechanical Goods Div., 1230 Avenue of the Americas, New York 20, N. Y. (1, 2, 3, 4, 5, 7, 9, 10, 11, 12, 13, 15, 16, 18, 19, 21, 22, 23, 26, 27, 28)  
U. S. Wire & Cable Corp., Progress & Monroe Sts., Union, N. J. (4, 5, 9, 14, 15, 24, 26)  
Walker Brothers, End St., Conshohocken, Pa. (1, 10, 14, 17, 18, 19, 20, 28)  
Wesix Electric Heater Co., 390 First St., San Francisco 5, Calif. (8)  
West Instrument Corp., 525 N. Noble St., Chicago 23, Ill. (26)  
Western Insulated Wire Co., 2425 E. 30th St., Los Angeles 58, Calif. (1, 2, 4, 5, 13, 14, 17, 19, 26, 28)  
Whitney Blake Co., 1565 Dixwell Ave., Hamden, Conn. (4, 5, 9, 12, 17, 18, 19, 22, 24, 27)  
● **WIEGAND CO., EDWIN L.**, 7637 Thomas Blvd., Pittsburgh 8, Pa. (8)—ADV. PG. 148

**CABLE, Misc.**  
Deck—see **CORD, Heat- and Moisture-Resistant**  
Messenger—see **CABLE, Steel Strand**  
Pigtail—see **CONDUCTORS, Braided Copper**  
Suburban—see **CABLE, (Classified as to Usage) Park, Armored**  
see also **WIRE; CORD; CORDS**

**CALLS—see CHIMES; SYSTEMS, Communicating; SIGNALS, Nurse and Doctor Call**

## CAMBRIC, Varnished or Oiled

American Insulated Wire Corp., 36 Freeman St., Pawtucket, R. I.  
Brand Dielectrics, Inc., 57 North St., Willimantic, Conn.  
Federal Telephone and Radio Co., 100 Kingsland Rd., Clifton, N. J.  
General Electric Co., Chemical & Metallurgical Div., Coshocton, Ohio  
General Electric Co., Chemical & Metallurgical Div., Pittsfield, Mass.  
Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo.  
Irving Varnish and Insulator Div., Minnesota Mining and Mfg. Co., 6 Argyle Terrace, Irvington 11, N. J.  
Mica Insulator Co., P. O. Box 1076, Schenectady 1, N. Y.  
Mitchell Rand Insulation Co., 51 Murray St., N. Y. 7, N. Y.  
National Electric Products Corp., Gateway Center, 140 Stanwix St., Pittsburgh 22, Pa.  
● **NATVAR CORP.**, 211 Randolph Ave., Woodbridge, N. J.—ADV. PG. 135  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.

## CANDLES, Candelabra Socket

Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I.  
Elite Glass Co., Inc., 111 W. 22nd St., New York 11, N. Y.

## CANOPIES, Fixture

Argo Products Co., 1008 N. 22 St., St. Louis 8, Mo.  
B. M. D. & R. Inc., 7020 Walker St., St. Louis Park, Minneapolis 16, Minn.  
Elite Glass Co., Inc., 111 W. 22nd St., New York 11, N. Y.  
M. & H. Fixture Co., 1313 Walton Ave., St. Louis 13, Mo.  
Neo-Ray Products Inc., 315 E. 22 St., N. Y. 10, N. Y.  
Perfect-Line Mfg. Corp., Old Country Rd. & Railroad Ave., P. O. Box 65, Hicksville, L. I., N. Y.  
Russell & Stoll Co., Inc., 125 Barclay St., N. Y. 7, N. Y.  
Sun-Lite Mfg. Co., 2555 Bellevue Ave., Detroit 7, Mich.  
Yorkville Metal Products Co., 677 Broadway, N. Y. 12, N. Y.

## CANTHOOKS

Dickie Tool Co., 1201 Warren Ave., Downers Grove, Ill.  
Dixie Logging Tool Co., Chattanooga, Tenn.

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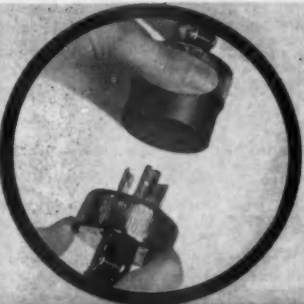
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4. Fuse
5. Ground Pipe
6. Plastic Sealing
7. Service
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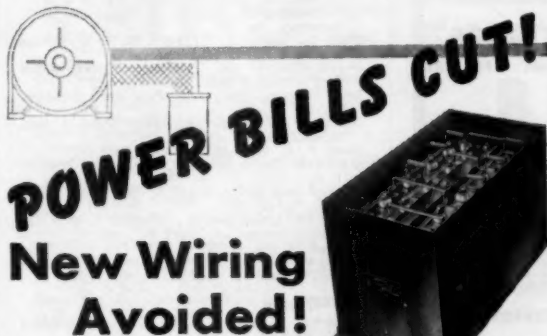
Adalet Mfg. Co., 14300 Lorain Ave., Cleveland 11, Ohio (7)  
Aircraft-Marine Products, Inc., 2100 Paxton St., Harrisburg, Pa. (1)  
Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. (3)  
Arrow-Hart & Hegeman Electric Co., 103 Hawthorn St., Hartford 6, Conn. (1, 2, 3, 8)  
Automatic & Precision Mfg. Co., 252 Hawthorne Ave., Yonkers 5, N. Y. (1)  
Beckley Electric Co., Inc., 468-470 Grand Ave., Brooklyn 38, N. Y. (1)  
Blackhawk Industries, 250 S. Main St., Dubuque, Iowa (3)  
Bryant Electric Co., 1421 State St., (Box D., Barnum Sta.), Bridgeport 2, Conn. (1, 8)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (1)  
Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (1, 8)  
● **CROUSE-HINDS CO.**, Syracuse 1, N. Y. (3, 7)—ADV. PG. 116-117  
Dependable-Electric Mfg. Co., Inc., 18 Johnson Ave., Brooklyn 6, N. Y. (1)  
Duro Fittings Co., 2040 Santa Fe Ave., Los Angeles 21, Calif. (3)  
Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (1, 2, 4, 8)  
Electrical Fittings Corp., 37-50 57th St., Woodside 77, N. Y. (3, 7)  
Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (3, 5, 7)  
Gem Electric Mfg. Co., Inc., 237 37th St., Brooklyn, N. Y. (1, 4)  
General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill. (1)  
General Electric Co., Chemical & Metallurgical Div., Pittsfield, Mass. (6)  
General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn. (1)  
General Electric Co., Wiring Device Dept., 95 Hathaway St., Providence 7, R. I. (1)  
Glade Mfg. Co., 1632 W. 75 Pl., Chicago 20, Ill. (1)  
Glastic Corp., 1823 E. 40 St., Cleveland 3, Ohio (4)

Hatfield Wire and Cable Div., Continental Copper & Steel Indus., Inc., 487 Hillside Ave., Hillside 5, N. J. (1)  
Hubbell Inc., Harvey, State & Bostwick Ave., Bridgeport 2, Conn. (1, 4, 8)  
Industrial Devices Inc., Edgewater 19, N. J. (1)  
Kas-Kel Electric Co., Inc., 5 Union Sq., N. Y. 3, N. Y. (1)  
Knox Porcelain Corp., 2706 Mynders Ave. (P. O. Box 2031), Knoxville 1, Tenn. (1, 3, 8)  
Kulka Electric Mfg. Co., Inc., 633 S. Fulton Ave., Mount Vernon, N. Y. (1, 2)  
Leviton Mfg. Co., Inc., 234 Greenpoint Ave., Brooklyn 22, N. Y. (1, 8)  
M. & W. Electric Mfg. Co., Inc., P. O. Box 87, S. Walnut St., East Palestine, Ohio (3, 7)  
Massey, Inc., A. H., 111 3rd St. (P. O. Box 206), Derby, Conn. (1)  
Metaelectric, Inc., 677 Broadway, N. Y. 12, N. Y. (3, 7)  
● **MIDWEST ELECTRIC MFG. CO.**, 1639 Walnut St., Chicago 12, Ill. (3, 7)—ADV. PG. 104-105  
Miller Electric Co., 120 Main St., Pawtucket, R. I. (1)  
Oceanic Electric Products Corp., 187 Water St., New York 38, N. Y. (1, 2)  
Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (5)  
Pass & Seymour, Inc., Syracuse 9, N. Y. (1, 8)  
Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (3, 7)  
Rattan Mfg. Co., 10 Wall St. (P. O. Box 1745), New Haven 7, Conn. (3, 7)  
Richards Co., J. R., P. O. Box 482, Carnegie, Pa. (3, 7)  
● **RODALE MFG. CO., INC.**, 6th & Minor Sts., Emmaus, Pa. (1, 2, 7, 8)—ADV. PG. 143  
Emmaus, Pa. (1, 2, 7, 8)—ADV. PG. 143  
Royal Electric Co., Inc., 95 Grand Ave., Pawtucket, R. I. (1)  
Russell & Stoll Co., Inc., 125 Barclay St., New York 7, N. Y. (1)  
Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)  
Slater Electric & Mfg. Co., Inc., 56th St. & 37 Ave., Woodside 77, N. Y. (1)  
Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 35, Pa. (3)  
Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (3, 7)  
Thepitt Mfg. Co., Gregg & Hammond Sts., Carnegie, Pa. (3)  
United States Rubber Co., Electrical Wire and Cable Dept., 1230 Avenue of the Americas, New York 20, N. Y. (1)  
United States Rubber Co., Mechanical Goods Div., 1230 Avenue of the Americas, New York 20, N. Y. (1)  
U. S. Wire & Cable Corp., Progress & Monroe Sts., Union, N. J. (1)

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4. Fluorescent Lamp
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6. Pole Type
7. Power Factor Correcting
8. Radio

Ajax Electrothermic Corp., Ajax Park, Trenton 5, N. J. (7)  
Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee 4, Wis. (8)  
Cambridge Tharmionic Corp., 445 Concord Ave., Cambridge 38, Mass. (8)  
Cornell-Dubilier Electric Corp., 333 Hamilton Blvd., South Plainfield, N. J. (1, 2, 3, 4, 5, 6, 7, 8)  
Erie Resistor Corp., 644 W. 12 St., Erie, Pa. (4, 8)  
Fast & Co., John E., 3183 N. Crawford Ave., Chicago 41, Ill. (1, 3, 4, 5, 6, 7, 8)  
General Electric Co., Apparatus Sales Div., Schenectady 5, N. Y. (1, 2, 3, 4, 5, 6, 7, 8)  
General Electric Co., Electronics Div., Electronics Park, Syracuse, N. Y. (1)  
Good-All Electric Mfg. Co., 112 W. First St., Ogallala, Neb. (5, 8)  
Illinois Condenser Co., 1616 N. Throop St., Chicago 22, Ill. (2, 5, 7, 8)  
Line Material Co., 700 West Michigan St., Milwaukee, Wis. (6, 7)  
Micamold Radio Corp., 1087 Flushing Ave., Brooklyn 37, N. Y. (2, 3, 4, 5, 6, 7, 8)  
Mucon Corp., 9 St. Francis St., Newark 5, N. J. (1, 3)  
Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla. (6, 7)  
Philo Corp., Tloga & C Sts., Phila. 34, Pa. (2, 5)  
Pyramid Electric Co., 1445 Hudson Blvd., North Bergen, N. J. (2, 5, 8)  
Sprague Electric Co., North Adams, Mass. (1, 2)  
Springfield Electrical Specialties, Inc., 120 Wooster St., New York 12, N. Y. (5, 8)  
Stackpole Carbon Co., Tannery St., St. Marys, Pa. (8)  
Suclar Laboratories Inc., 1197 McCarter Highway, Newark, N. J. (4)  
Tobe Deutschmann Corp., Providence Highway, Norwood, Mass. (1, 2, 5, 6, 7, 8)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 3, 4, 5, 6, 7)  
● **WESTINGHOUSE ELECTRIC SUPPLY CO.**, 40 Wall St., New York 5, N. Y. (7)—ADV. PG. SECOND COVER



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**CAPSTANS, Cable-Pulling—see PULLERS, Cable**

## CARBONS

1. Arc Lamp
2. Battery

Becker Bros. Carbon Co., 3450 So. Laramie Ave., Clarendon 50, Ill. (1)  
Century Lighting Inc., 521 W. 43 St., New York 36, N. Y. (1)  
Chapin Co., Inc., Chas. E., 227 Fulton St., N. Y. 7, N. Y. (2)  
Mole-Richardson Co., 937 N. Sycamore Ave., Hollywood 38, Calif. (1)  
National Carbon Co., 30 E. 42 St., N. Y. 17, N. Y. (1, 2)

**CARBONS, Welding—see ELECTRODES, Welding**

**CARILLONS—see CHIMES**

**CARS, Cable Stringing**

Chance Co., A. B., 210 N. Allen St., Centralia, Mo.  
Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif.

**CARTS, Electrician's Tool**

Bernard-Franklin Co., Inc., Hedley & Balfour Sts., Phila. 37, Pa.  
Empire Wire and Cable Co., Penn Yan, N. Y.  
Pucal Enterprises, Inc., 3746 Kelley Ave., Cleveland 14, Ohio

**CELLS, Photo-Electric**

Bradley Laboratories, Inc., 168 Columbus Ave., New Haven 11, Conn.  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
Vickers Electric Div., Vickers, Inc., 1847 Locust St., St. Louis 9, Mo.

**CELLS, Misc.**

Flashlight—see BATTERIES, Primary Dry  
Selenium—see CELLS, Photo-Electric

**CEMENT**

1. Commutator
2. Insulating

Berthig Co., Inc., Geo. Co., P. O. Box 115 B, East Rutherford, N. J. (2)

Carey Mfg. Co., Philip, Cincinnati 15, Ohio (2)

Du-Co Ceramics Co., Main St., Extension (Box 144), Saxonburg, Pa. (2)

Early Co., Edward E., 1129-5th St. N. W., Canton 3, Ohio (1)

General Electric Co., Chemical & Metallurgical Div., Pittsfield, Mass. (2)

Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill. (1)

Insulation and Wires, Inc., 3435 Chouteau Ave., St. Louis 3, Mo. (1)

Javex, P. O. Box 646, Redlands, Calif. (2)

Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio (1)

Mitchell Rand Insulation Co., 51 Murray St., N. Y. 7, N. Y. (1, 2)

Norton Co., 1 New Bond St., Worcester 6, Mass. (2)

Sauerisen Cements Co., 1045 N. Canal St., Pittsburgh 15, Pa. (1, 2)

Standard Asbestos Mfg. Co., 860 W. Evergreen Ave., Chicago 22, Ill. (2)

## CENTERS, Load

Arrow-Hart & Hegeman Electric Co., 103 Hawthorn St., Hartford 6, Conn.

Continental Electric Equipment Co., Box 1055, Cincinnati 1, Ohio

Electric Service Engineering Co., 10 Third Ave., Joliet, Ill.

General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.

Gustavson, Inc., 8600 Chestnut St., Kansas City 30, Mo.

Jay Mfg. Co., H. W. Oliver Bldg., Pittsburgh 22, Pa.

Kolton Electric Mfg. Co., 123 New Jersey Railroad Ave., Newark 5, N. J.

Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa.

Square D Co., 6060 Rivard St., Detroit 11, Mich.

Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.

## CENTERS, Misc.

Motor Control—see PANELBOARDS  
Power—see SUBSTATIONS

## CHAIN

1. Block
2. Fixture, Heavy Duty
3. Fixture, Plain and Ornamental
4. Grounding, High Tension Line
5. Socket
6. Transmission

American Chain & Cable Co., Inc., American Chain Div., 454 E. Princess St., York, Pa. (2, 3)

Browning Mfg. Co., Mayville, Ky. (6)

Bryant Electric Co., Box D Barnum Station, Bridgeport 2, Conn. (5)

Chain Belt Co., 4701 W. Greenfield Ave., Milwaukee 1, Wis. (6)

Chester Hoist Div., National Screw & Mfg. Co., Lisbon, Ohio (1)

Cincinnati Pump & Mfg. Co., Inc., 3182 Beekman St., Cincinnati 23, Ohio (2, 3)

Diamond Chain Co., Inc., 402 Kentucky Ave., Indianapolis, Ind. (1, 6)

Dodge Mfg. Corp., 1944 S. William St., Milwaukee, Ind. (6)

Eastern Chain Works, Inc., 309 E. 22 St., New York 6, N. Y. (2, 3, 4)

Elite Glass Co., Inc., 111 W. 22nd St., New York 11, N. Y. (3)

Empire Wire and Cable Co., Penn Yan, N. Y. (3)

Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (2)

Link-Belt Co., 307 N. Michigan Ave., Chicago 1, Ill. (1, 6)

Morse Chain Co., Borg Warner Corp., Ithaca, N. Y. (6)

Republic Steel Corp., Chain Div., Broadway & Chalmers Rd., Cleveland 5, Ohio (1, 2, 3, 5, 6)

Whitney Chain Co., 237 Hamilton St., Hartford 2, Conn. (1, 6)

Yorkville Metal Products Co., 677 Broadway, N. Y. 12, N. Y. (2, 3, 5)

## CHAIN, Misc.

Ball and Bead—see CHAIN, Socket

Pull—see CHAIN, Socket

Roller—see CHAIN, Transmission

Silent—see CHAIN, Transmission

**CHAIR, Cable—see CARS, Cable Stringing**

**CHANDELIERS—see FIXTURES, Lighting, Ornamental, Interior**

## CHANGERS, Lamp

1. Fluorescent
2. Incandescent

Chadsey Corp., P. O. Box 1858, Hartford 1, Conn. (1, 2)

Gets-A-Lite Co., 3865 N. Milwaukee Ave., Chicago 41, Ill. (1)

Lamp Snatchers Co., 3013 N. Clark St., Chicago 14, Ill. (1, 2)

Miroflexor Co., Inc., 148 19th St., Brooklyn 2, N. Y. (2)

Utilities Service Co., 1 Pine St., Allentown, Pa. (2)

## CHANGERS, Misc.

Frequency—see CONVERTERS, Frequency

Speed—see REDUCERS, Speed; TRANSMISSIONS, Variable Speed

## CHANNEL

Double Arming—see BRACES, Pole Line, Crossarm

Infrared Drying—see HEATERS, Space, Electric, Radiant, (Infrared Lamp Fixtures)

Wiring—see RACEWAYS; WIREWAYS

## CHARGERS, Battery

Accurate Engineering Co., 2005 Blue Island Ave., Chicago 8, Ill.

Acme Electric Corp., 36 Water St., Cuba, N. Y.

Anglo Corp., 2037 W. Division St., Chicago 22, Ill.

Automatic Switch Co., 391 Lakeside Ave., Orange, N. J.

Baldor Electric Co., 4353 Duncan Ave., St. Louis 10, Mo.

Blitz Electric Co., 5713 Wentworth Ave., Chicago 21, Ill.

Bogue Electric Mfg. Co., 52 Iowa Ave., Paterson 3, N. J.

Cornell-Dubilier Electric Corp., 333 Hamilton Blvd., South Plainfield, N. J.

Electric Products Co., 1725 Clarkstone Rd., Cleveland 12, Ohio

Electrical Facilities, Inc., 4224 Holden St., Oakland 8, Calif.

Electronic Instrument Co., Inc., 84 Withers St., Brooklyn 11, N. Y.

Federal Telephone and Radio Co., 100 Kingsland Rd., Clifton, N. J.

Fox Products Co., 4720 N. 18 St., Phila. 41, Pa.

General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.

General Nuclear Corp., 550 Fifth Ave., New York 27, N. Y.

General Scientific Equipment Co., 27th & Huntingdon Sts., Phila. 32, Pa.

Georator Corp., Manassas, Va.

Gould-National Batteries, Inc., Trenton 7, N. J.

Hertner Electric Co., 12690 Elmwood Ave., Cleveland 11, Ohio

Heyer Industries Inc., 471 Cortlandt St., Belleville 9, N. J.

Hobart Bros., Hobart Square, Troy 1, Ohio

Hollingsworth, John R., Nutt & French Creek Rds., Phoenixville, Pa.

International Electric Fence Co., Inc., 924 Albany St. (Box 252) Caldwell, Idaho

K. W. Battery Co., Inc., 3555 Howard St., Skokie, Ill.

Katolight Corp., First Ave. at Chestnut (P. O. Box 891), Mankato, Minn.

Langwin Mfg. Corp., 37 W. 65 St., N. Y. 23, N. Y.

Lee Electric & Mfg. Co., 2806 Clearwater St., Los Angeles 39, Calif.

Lord-Taber Co., Inc., 40 Ontario St., Canadaigua, N. Y.  
 McCalpin-Christie Corp., 3410 W. 67 St., Los Angeles 43, Calif.  
 Multi-Matic Corp., 14741 Bassemmer St., Van Nuys, Calif.  
 Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla.  
 North Electric Mfg. Co., 501 S. Market St., Gallon, Ohio  
 Onan Sons, Inc., D. W., University Ave. S. E. at 25th, Minneapolis 14, Minn.  
 Opad Electric Co., 69 Murray St., New York 7, N. Y.  
 Peer, Inc., 1220 Milton St., Benton Harbor, Mich.  
 Quick Charge, Inc., 1750 N. E. 10th St., Oklahoma City 4, Okla.  
 Raytheon Mfg. Co., Equipment Marketing Div., 100 River St., Waltham 54, Mass.  
 Richardson-Allen Corp., 116-15 Fifteenth Ave., College Point, L. I., N. Y.  
 Schauer Mfg. Corp., 4500 Alpine Ave., Rossmore, Ohio  
 Standard Electric Time Co., 129 Logan St., Springfield, Mass.  
 Ther Electric & Machine Works, 17 S. Jefferson St., Chicago 6, Ill.  
 Triple-A Specialty Co., 2101 Walnut St., Chicago 12, Ill.  
 U-C-Lite Mfg. Co., 1050 W. Hubbard St., Chicago 22, Ill.  
 Weidenhoff, Inc., Joseph, Algona, Iowa  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.  
 Yardney Electric Corp., 40-46 Leonard St., New York 13, N. Y.

#### CHARGERS, Magnet

General Nuclear Corp., 550 Fifth Ave., New York 17, N. Y.  
 Opad Electric Co., 69 Murray St., New York 7, N. Y.  
 Radio Frequency Laboratories, Inc., Boonton, N. J.  
 Raytheon Mfg. Co., Equipment Marketing Div., 100 River St., Waltham 54, Mass.  
 Weidenhoff, Inc., Joseph, Algona, Iowa

#### CHARTS, Instrument Face—see DIALS, Instrument

#### CHIMES

Auth Electric Co., Inc., 34-20 45th St., L. I. C. 1, N. Y.  
 Autocall Co., Shelby, Ohio  
 Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I.  
 Edwards Co., Inc., Norwalk, Conn.  
 International Business Machines Corp., 590 Madison Ave., N. Y. 22, N. Y.  
 Leviton Mfg. Co., Inc., 236 Greenpoint Ave., Brooklyn 22, N. Y.  
 Liberty Bell Mfg. Co., Inc., Short St., Minerva, Ohio  
 Mayland's Son, R. H., 54 Willoughby, Brooklyn 1, N. Y.  
 NuTone, Inc., Madison & Red Bank Roads, Cincinnati 27, Ohio  
 Partrick & Wilkins Co., 51 N. Seventh St., Phila. 6, Pa.  
 Raytheon Mfg. Co., Equipment Marketing Div., 100 River St., Waltham 54, Mass.  
 Rittenhouse Co., Inc., East St., Honeoye Falls, N. Y.  
 Signal Engineering & Mfg. Co., Branchport Ave., Long Branch, N. J.  
 Spertl Faraday, Inc., 1322 E. Church St., Adrian, Mich.

#### CHOKES, Ballast—see BALLASTS, Lamp, Fluorescent

#### CIRCUIT-BREAKERS—see BREAKERS

#### CIRCULATORS—see FANS

#### CIRCUITS, Printed

Centralab Div., Globe-Union Inc., 900 E. Keefe Ave., Milwaukee 1, Wis.  
 International Resistance Co., 401 N. Broad St., Phila. 8, Pa.  
 Magnavox Co., Fort Wayne 4, Ind.  
 Raytheon Mfg. Co., Waltham 54, Mass.  
 Sequoia Process Corp., 871 Willow St. (P. O. Box 1007), Redwood City, Calif.  
 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif.  
 Stackpole Carbon Co., Tannery St., St. Marys, Pa.  
 Wing Mfg. Co., L. J., Linden, N. J.

#### CLAMPS

1. Busbar Holding
2. Cable Spinning
3. Ground, Welding

Blitz Electric Co., 5713 Wentworth Ave., Chicago 21, Ill. (3)  
 Cable Spinning Equipment Co., 3100 Topeka Ave., Topeka, Kan. (2)  
 Cam-Lok Div., Empire Products, Inc., 9051 Blue Ash Rd. (Box 98), Cincinnati 36, Ohio (3)  
 Delta-Star Electric Div., H. K. Porter Co., Inc., 2437 Fulton St., Chicago 12, Ill. (1)  
 Dessert Mfg. Corp., 249-255 Huron St., Brooklyn 22, N. Y. (1)  
 Erico Products, Inc., 2070 E. 61 Place, Cleveland 3, Ohio (3)  
 Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (3)

Kearney Corp., James R., 4236 Clayton Ave., St. Louis 10, Mo. (3)  
 Krueger & Hudepohl, Inc., 5 E. Third St., Cincinnati 2, Ohio (1, 3)  
 Lapp Insulator Co., Inc., 5 Gilbert St., Leroy, N. Y. (1)  
 Memco Engineering & Mfg. Co., Inc., Commack, L. I., N. Y. (1)  
 Mineralac Electric Co., 25 N. Peoria St., Chicago 7, Ill. (1, 2, 5)  
 Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (1)  
 Powercraft Corp., 2215 De Kalb St., St. Louis 4, Mo. (1)  
 Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa. (1)  
 Royal Electric Mfg. Co., 1122 E. 87 St., Chicago 19, Ill. (1)  
 Rungreen Mfg. Co., 14262 Birwood Ave., Detroit 38, Mich. (1)  
 Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J. (1)  
 Trico Fuse Mfg. Co., 2948 No. 5th St., Milwaukee 12, Wis. (1, 3)  
 Wagner Mfg. Co., Inc., 350 W. Adams St., Jackson, Mo. (3)

#### CLAMPS, Pole Line

1. Angle
2. Bonding
3. Cable Suspension
4. Conductor
5. Crossarm Suspension
6. Dead End
7. Ground Rod
8. Ground Wire Suspension
9. Insulator Supporting
10. Jumper
11. Live Line Top
12. Messenger
13. Suspension

Adalet Mfg. Co., 14300 Lorain Ave., Cleveland 11, Ohio (3)  
 Anderson Brass Works, Inc., P. O. Drawer 2151, Birmingham 1, Ala. (1, 3, 6, 7, 13)  
 Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa. (6, 10, 12)  
 ●BLACKBURN CORP., JASPER, 35 Madison St., St. Louis 6, Mo. (6, 7)—ADV. PG. 107  
 Blackhawk Industries, 250 S. Main St., Dubuque, Iowa (7)  
 Blaco Mfg. Co., 6541 Euclid Ave., Cleveland 3, Ohio (7)  
 Bodendieck Tool Co., 325 E. Main St., Taylorville, Ill. (11)  
 Brewer-Titchener Corp., 111 Port Watson St., Cortland, N. Y. (1, 3, 4, 5, 6, 8, 10, 12, 13)  
 Burnside Engineering & Mfg. Co., Norwalk, Conn. (3, 4, 6, 7, 8, 9, 10, 13)  
 Chance Co., A. B., 210 N. Allen St., Centralia, Mo. (2, 4, 10, 11)  
 Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (3, 6, 13)  
 Cope, Inc., T. J., 711 So. St., Phila. 43, Pa. (12)  
 Copperweild Steel Co., Wire and Cable Div., Glassport, Pa. (7)  
 Delta-Star Electric Div., H. K. Porter Co., Inc., 2437 Fulton St., Chicago 12, Ill. (7, 9)  
 Diamond Expansion Bolt Co., Inc., Garwood, N. J. (1, 2, 3, 6, 12)  
 Dessert Mfg. Corp., 249-255 Huron St., Brooklyn 22, N. Y. (7, 10, 11)  
 Efficiency Electric & Mfg. Co., Park Ave., Ext. P. O. Box 30, East Palestine, Ohio (3, 6, 9, 12)  
 Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa. (6)  
 Electrical Engineers Equipment Co., 25th Ave. & Division St., Melrose Park, Ill. (3, 4, 6, 7, 9)  
 Electrical Mfg. Co., Box 217, Battle Creek, Mich. (1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13)  
 Fargo Mfg. Co., Inc., 845 Main St., Poughkeepsie, N. Y. (7, 12)  
 Fullman Mfg. Co., 1209-1215 Jefferson St., Latrobe, Pa. (9)  
 Green, Inc., R. H., 1201 24th St., Oakland 7, Calif. (8)  
 Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa. (1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13)  
 Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (3, 5, 6, 7, 8, 9, 10, 11, 13)  
 Kearney Corp., James R., 4236 Clayton Ave., St. Louis 10, Mo. (4, 6, 7, 10, 11)  
 Knox Porcelain Corp., 2706 Myanders Ave. (P. O. Box 2031), Knoxville 1, Tenn. (1, 3, 6, 8, 9, 13)  
 Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif. (1, 2, 3, 5, 6, 7, 8, 12)  
 Krueger & Hudepohl, Inc., 5 E. Third St., Cincinnati 2, Ohio (1, 2, 4, 6, 7)  
 Kulka Electric Mfg. Co., Inc., 633 S. Fulton Ave., Mount Vernon, N. Y. (10)  
 Lapp Insulator Co., Inc., 35 Gilbert St., Leroy, N. Y. (3, 4, 5, 6, 9, 13)  
 Leibfried Mfg. Corp., C. H., 95-101 Guernsey St., Brooklyn 22, N. Y. (1, 3, 4, 5, 6, 9, 10, 12, 13)  
 Malleable Iron Fittings Co., Branford, Conn. (2, 3, 8, 12, 13)  
 Marbelite Co., Inc., 27 Warren St., New York 7, New York (13)  
 Metallectrics, Inc., 677 Broadway, N. Y. 12, N. Y. (2)  
 Murray Co., Inc., D. A., 632 N. Mill St., Tipton, Ind. (1, 7, 8)  
 Ohio Brass Co., 380 N. Main St., Mansfield, Ohio (3, 4, 6, 8, 10, 13)  
 Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (1, 2, 3, 5, 6, 7, 8, 9, 12, 13)

Pacific Car and Foundry Co., 4th & Factory, Renton, Wash. (6, 12)  
 Penn-Union Electric Corp., 315 State St., Erie, Pa. (1, 2, 3, 4, 6, 7, 8, 9, 10, 13)  
 ●PORCELAIN PRODUCTS, INC., P. O. Box 308, Findlay, Ohio (1, 3, 4, 5, 6, 8, 9, 10, 12, 13)—ADV. PG. 139  
 Powercraft Corp., 2215 De Kalb St., St. Louis 4, Mo. (9)  
 Preformed Line Products Co., 5349 St. Clair Ave., Cleveland 3, Ohio (3, 4, 6, 8, 11, 12, 13)  
 Rakit Corp., 711 S. 50th St., Phila. 43, Pa. (5)  
 Red Seal Electric Co., 6321 Detroit Ave., Cleveland 2, Ohio (6)  
 Richards Co., J. R., P. O. Box 482, Carnegie, Pa. (7, 9)  
 Royal Electric Mfg. Co., 1122 E. 87 St., Chicago 19, Ill. (6, 7)  
 Safety Live Line Tool Co., 973 86th Ave., Oakland 21, Calif. (7, 10, 11)  
 St. Louis Malleable Casting Co., 7701 N. Conduit Ave., St. Louis 15, Mo. (6)  
 Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa. (1, 2, 3, 4, 5, 6, 7, 8, 9, 13)  
 Sherman Mfg. Co., H. B., 22 Barney, Battle Creek, Mich. (2, 7, 10)  
 Slater Electric & Mfg. Co., Inc., 56th & 37 Ave., Woodside 77, N. Y. (1)  
 Southern Electrical Equipment Co., 308 W. Bland St., Charlotte 3, N. C. (3, 6, 7, 12, 13)  
 Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa. (6)  
 Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (2, 7)  
 Thomas Associates, 4607 Alger St., Los Angeles 39, Calif. (2, 3, 10, 13)  
 Thomas & Sons Co., R., Lisbon, Ohio (1, 3, 6, 8, 9, 13)  
 Utilities Service Co., 1 Pine St., Allentown, Pa. (1, 2, 3, 5, 6, 7, 8, 9, 12, 13)  
 Victor Insulators Div., I-T-E Circuit Breaker Co., Victor, N. Y. (1, 3, 4, 5, 6, 8, 9, 13)  
 Weaver Co., J. A., 2110 Howard St., St. Louis 6, Mo. (6, 7, 10, 11)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (5, 6)

#### CLAMPS, Wiring

1. Beam
2. Conduit Hanging
3. Fuse Clip
4. Ground
5. Service Entrance
6. Telephone Drop-Wire

American Steel & Iron Works, 5801 S. Lowe Ave., Chicago 21, Ill. (2)  
 Anderson Brass Works, Inc., P. O. Drawer 2151, Birmingham 1, Ala. (4, 5)

## MINERALLAC BEAM CLAMPS

FOR  
MOUNTING  
HANGERS  
ON I-BEAMS



Mounts Minerallac hangers No. 8 to No. 6 on I-beams safely without necessity of drilling holes. Made of heavy gauge zinc plated steel with deep drawn ribs to give needed strength, these durable, lightweight beam clamps have 1/4-20 tapped holes—will fit beam flanges up to 1/2 inch thick. Furnished with case-hardened set screw. Low cost.

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RKO BLDG. • RADIO CITY • NEW YORK 20  
Foundry, Factory and Shipping Point,  
Tarryville Conn.

- Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. (4)  
Associated Lighting Service, 876 Kaynys St., Redwood City, Calif. (1, 2)  
● **BLACKBURN CORP.**, JASPER, 35 Madison St., St. Louis 6, Mo. (4, 5)—ADV. PG. 107  
Blackhawk Industries, 250 S. Main St., Dubuque, Iowa (1, 2, 4, 5)  
Blanco Mfg. Co., 6541 Euclid Ave., Cleveland 3, Ohio (4)  
Brewer-Titchener Corp., 111 Port Watson St., Cortland, N. Y. (4)  
Burndy Engineering Co., Inc., Norwalk, Conn. (4, 5)  
Burns Co., James F., 705-715 Cherry St., Phila. 6, Pa. (2)  
Busmann Mfg. Co., 2536 W. University St., St. Louis 7, Mo. (3)  
Clarke Sanding Machine Co., 30 E. Clay Ave., Muskegon, Mich. (3)  
Cleveland Switchboard Co., 2925 E. 79 St., Cleveland 4, Ohio (2)  
Crouse-Hinds Co., Syracuse 1, N. Y. (2)  
Delta-Star Electric Div., H. K. Porter Co., Inc., 2437 Fulton St., Chicago 12, Ill. (1, 4)  
Diamond Expansion Bolt Co., Inc., Garwood, N. J. (4)  
Dossert Mfg. Corp., 249-255 Heron St., Brooklyn 22, N. Y. (4, 5)  
Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City, 1, N. Y. (4)  
Economy Fuse & Mfg. Co., 2717 N. Greenview Ave., Chicago 14, Ill. (3)  
Efficiency Electric & Mfg. Co., Park Ave. Ext., P. O. Box 30, East Palestine, Ohio (1, 2)  
Electrical Engineers Equipment Co., 25th Ave. & Division St., Melrose Park, Ill. (4)  
Electrical Fittings Corp., 37-50 57th St., Woodside 77, N. Y. (1, 2, 4, 5)  
Fargo Mfg. Co., 845 Main St., Poughkeepsie, N. Y. (4, 5)  
Fullman Mfg. Co., 1209-12-15 Jefferson St., Latrobe, Pa. (2)  
Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (1, 2, 4, 5)  
General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn. (3)  
Green, Inc. R. H., 1201 24th St., Oakland 7, Calif. (2)  
Holub Industries, Inc., 442 Elm St., Sycamore, Ill. (3)  
Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill. (3)  
Joslyn Mfg. and Supply Co., 30 N. Wacker Drive, Chicago 6, Ill. (4, 5, 6)  
Kearney Corp., James R., 4236 Clayton Ave., St. Louis 10, Mo. (5)  
Knight Electrical Products Corp., 168 Van Brunt St., Brooklyn 31, N. Y. (1, 2)  
Knox Porcelain Corp., 2706 Myanders Ave., (P. O. Box 2031), Knoxville 1, Tenn. (4)

- Kolton Electric Mfg. Co., 123 New Jersey Railroad Ave., Newark 5, N. J. (3)  
Korns Co., C. C., P. O. Box 483 Johnstown, Pa. (2)  
Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif. (1, 2, 4)  
Krupper & Hudson, Inc., 5 E. Third St., Cincinnati 2, Ohio (4, 5)  
Liebfried Mfg. Corp., C. H., 95-101 Guernsey St., Brooklyn 22, N. Y. (1, 2)  
M. & W. Electric Mfg. Co., Inc., P. O. Box 87, S. Walnut St., East Palestine, Ohio (1, 2, 4, 5)  
Marbelite Co., Inc., 27 Warren St., New York 7, New York (5)  
Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio (3)  
Memco Engineering & Mfg. Co., Inc., Commack, L. I., N. Y. (4)  
Metalectrica, Inc., 677 Broadway, N. Y. 12, N. Y. (4, 5)  
Meter Devices Co., 1001 Prospect Ave., S. W., Canton 6, Ohio (3)  
● **MIDWEST ELECTRIC MFG. CO.**, 1639 Walnut St., Chicago 12, Ill. (2, 4, 5)—ADV. PG. 104-105  
Mueller Electric Co., 1583 E. 31 St., Cleveland 14, Ohio (4)  
● **O. Z. ELECTRICAL MFG. CO., INC.**, 262 Bond St., Brooklyn 17, N. Y. (4)—ADV. PG. 136  
Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (4)  
Palme Co., Fullerton Ave. & Westgate Rd., Addison, Ill. (2)  
Pekcu Co., 1227 McDonald Ave., Brooklyn 30, N. Y. (4)  
Penn-Union Electric Corp., 315 State St., Erie, Pa. (4, 5, 6)  
Preformed Line Products Co., 5349 St. Clair Ave., Cleveland 3, Ohio (3, 6)  
Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (2, 5)  
Rakit Corp., 711 S. 50th St., Phila. 43, Pa. (2)  
Rattan Mfg. Co., 10 Wall St., (P. O. Box 1745), New Haven 7, Conn. (4, 5)  
Reliable Electric Co., 3145 Carroll Ave., Chicago 12, Ill. (3, 6)  
Richards Co., J. R., P. O. Box 482 Carnegie, Pa. (2, 4, 5)  
Roller, Inc., Wm. G., 159 Liberty Ave., Mineola, N. Y. (5)  
Sherman Mfg. Co., H. B., 22 Barney, Battle Creek, Mich. (4, 5)  
Sittler Corp., 18 N. Ada St., Chicago 7, Ill. (2)  
Specialties, Inc., 2936 Sacramento St., Pittsburgh 4, Pa. (3)  
Star Porcelain Co., Multhead Ave., Trenton 9, N. J. (3)  
Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa. (1, 2, 4)  
Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (4, 5)  
Superior Fuse & Mfg. Co., Inc., 221 Hudson St., Hoboken, N. J. (3)  
Thepfit Mfg. Co., Gregg & Hammond Sts., Carnegie, Pa. (2, 4, 5)  
Thomas Associates, 4607 Alger St., Los Angeles 39, Calif. (2)  
Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J. (3, 2, 4)  
Trico Fuse Mfg. Co., 2948 No. 5th St., Milwaukee 12, Wis. (3, 4)  
Utilities Service Co., 1 Pine St., Allentown, Pa. (4)  
Versabar Corp., 517 Communipaw Ave., Jersey City 6, N. J. (1, 2)  
Victor Specialties, 775 Main St., New Rochelle, N. Y. (2, 5)  
Waveland Electric Co., 5542 N. Ashland Ave., Chicago 40, Ill. (2)  
Weaver Co., J. A., 2110 Howard St., St. Louis 6, Mo. (4)

## **CLAMPS, Misc.**

- Bracket**—see **CLAMPS, Pole Line, Crossarm Suspension**  
**Crossover**—see **CLAMPS, Pole Line, Messenger**  
**Grode**—see **CLAMPS, Pole Line, Cable Suspension**  
**Guy**—see **CLAMPS, Pole Line, Messenger**  
**Loom**—see **CLAMPS, Wiring, Conduit Hanging**  
**Loop**—see **CLAMPS, Pole Line, Messenger**  
**Pipe**—see **CLAMPS, Wiring, Conduit Hanging**  
**Pole Reinforcing**—see **BANDS, Pole Strutting**  
**Sleeve**—see **TOOLS, Splicing**  
**Splicing**—see **TOOLS, Splicing**  
**Strain**—see **CLAMPS, Pole Line, Dead End Test**—see **CLIPS, Test**  
**Wire**—see **TOOLS, Splicing**  
**Wire Rope**—see **CLIPS, Wire Rope**

## **CLEANERS**

- 1. Commutator**  
**2. Fuse Clip**  
Co-operative Utilities Co., Inc., 4637-39 Mulberry St., Phila. 24, Pa. (1)  
Empire Wire and Cable Co., Penn Yan, N. Y. (1)  
Holub Industries, Inc., 442 Elm St., Sycamore, Ill. (1)  
Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill. (1, 2)  
Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio (1, 2)  
Rush Wire Stripper Div., Eraser Co., Inc., 1068 S. Clinton St., Syracuse 4, N. Y. (1)  
Sittler Corp., 18 N. Ada St., Chicago 7, Ill. (1)  
Superior Fuse & Mfg. Co., Inc., 221 Hudson St., Hoboken, N. J. (2)

- Turco Products, Inc., 6135 S. Central Ave., Los Angeles 1, Calif. (1)  
Waveland Electric Co., 5542 N. Ashland Ave., Chicago 40, Ill. (1)

## **CLEANERS, Vacuum**

- 1. Hand**  
**2. Household, Portable**  
**3. Industrial**  
**4. Stationary**  
Ace Co., P. O. Box 1212, 112 W. Washington St., Ocala, Fla. (1, 3)  
American Floor Surfacing Machine Co., 318 S. St. Clair St., Toledo 3, Ohio (3)  
American Vacuum Co., 816 S. Michigan Ave., Chicago, Ill. (1, 3, 4)  
Birtman Electric Co., 4140 Fullerton Ave., Chicago 39, Ill. (1, 2)  
Black & Decker Mfg. Co., Towson 4, Md. (3)  
Breuer Electric Mfg. Co., 5100 N. Ravenswood Ave., Chicago 40, Ill. (3)  
Doyle Co., J. E., 1220 W. 6th St., Cleveland 13, Ohio (4)  
Doyle Vacuum Cleaner Co., 225 Stevens St. S. W., Grand Rapids, Mich. (3)  
Dynamatic Div., Eaton Mfg. Co., Kenosha, Wis. (1)  
General Electric Co., Small Appliance Div., 1285 Boston Ave., Bridgeport 2, Conn. (2)  
General Floorcraft, Inc., 421 Hudson St., New York 14, N. Y. (3)  
Hamilton Beach Co., Racine, Wis. (1, 2)  
Handling Devices Co., Inc., 43-45 Pearl St., Brookline 46, Mass. (3)  
Holub Industries, Inc., 442 Elm St., Sycamore, Ill. (1, 3)  
Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill. (1, 3)  
Interstate Mfg. Corp., 26 Sterling St., East Orange, N. J. (2)  
Invincible Vacuum Cleaner Mfg. Co., Dover, Ohio (3)  
Kent Co., Inc., 359 Canal St., Rome, N. Y. (3)  
Lamson Corp., Lamson St., Syracuse 1, N. Y. (3, 4)  
Landers, Frary & Clark, 47 Center St., New Britain, Conn. (1, 2)  
Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio (3)  
Morrow Co., 400 W. Madison St., Chicago 6, Ill. (2, 3)  
National Super Service Co., Inc., 1946 N. 13 St., Toledo, Ohio (3)  
Pullman Vacuum Cleaner Corp., 33 Allerton St., Boston 19, Mass. (3)  
Siebring Mfg. Co., George, Iowa (3)  
Spencer Turbine Co., 486 New Park Ave., Hartford 6, Conn. (3, 4)  
Westinghouse Electric Corp., P. O. Box 968, Pittsburgh 30, Pa. (1, 2)  
Westinghouse Electric Corp., Electric Appliance Div., 246 E. Fourth St., Mansfield, Ohio (1, 2)

## **CLEANERS, Misc.**

- Armature Slot**—see **CLEANERS, Commutator**  
**Conduit**—see **MANDRELS, PICKUPS, Conduit Tool; RODS, Conduit**

## **CLEATS, Wiring**

- 1. Fibre**  
**2. Metal**  
**3. Porcelain**  
**4. Switchboard**  
Adalet Mfg. Co., 14300 Lorain Ave., Cleveland 11, Ohio (1)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (3)  
Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (3)  
Du-Co Ceramics Co., Main St. Extension (Box 144), Saxenburg, Pa. (3)  
Efficiency Electric & Mfg. Co., Park Ave. Ext., P. O. Box 30, East Palestine, Ohio (3)  
Knox Porcelain Corp., 2706 Myanders Ave. (P. O. Box 2031), Knoxville 1, Tenn. (3)  
Lint, Clyde W., 2323 W. 18 St., Chicago 8, Ill. (3)  
Meter Devices Co., 1001 Prospect Ave. S. W., Canton 6, Ohio (2)  
Morse Co., Frank W., 1300 Soldiers Field Rd., Boston 35, Mass. (2)  
Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (2, 4)  
● **PORCELAIN PRODUCTS, INC.**, P. O. Box 300, Findlay, Ohio (3)—ADV. PG. 139  
Red Seal Electric Co., 6321 Detroit Ave., Cleveland 2, Ohio (1)  
Saxenburg Ceramics, P. O. Box 100, Saxenburg, Pa. (3)  
Spaulding Fibre Co., Inc., 310 Wheeler St., Tonawanda, N. Y. (1)  
Stupakoff Ceramic Mfg. Co., Latrobe, Pa. (3)  
Superior Porcelain Co., 9314 Market St., Parkersburg, W. Va. (3)  
Taylor Fibre Co., Norristown, Pa. (1)  
Thomas & Sons Co., R., Lisbon, Ohio (3)  
Victor Specialties, 775 Main St., New Rochelle, N. Y. (2, 4)  
Wilmington Fibre Specialty Co., New Castle, Dela. (1)

## **CLEVIS**

- 1. Bolt**  
**2. Dead Ending**  
**3. Insulator**  
**4. Insulator, Strain**  
**5. Thimble**

Anderson Brass Works, Inc., P. O. Drawer 2151, Birmingham 1, Ala. (2, 5)  
Bethlehem Steel Co., Bethlehem, Pa. (1)  
Brewer-Titchener Corp., 111 Port Watson St., Cortland, N. Y. (3, 5)  
Cincinnati Pump & Mfg. Co., Inc., 3182 Beekman St., Cincinnati 23, Ohio (1)  
Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa. (3, 4)  
Electrical Mfg. Co., Box 217, Battle Creek, Mich. (1, 2, 3, 4, 5)  
Efficiency Electric & Mfg. Co., Park Ave. Ext., P. O. Box 30, East Palestine, Ohio (4)  
Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa. (1, 2, 3, 4, 5)  
Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (2, 3, 4, 5)  
Knox Porcelain Corp., 2706 Mynders Ave., (P. O. Box 2031), Knoxville 1, Tenn. (2, 3)  
Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif. (1, 2, 3, 4, 5)  
Laughlin Co., Thomas, 143 Fore St., Portland 6, Maine (5)  
Leibfried Mfg. Corp., C. H., 95-101 Gurnsey St., Brooklyn 22, N. Y. (2)  
Ohio Brass Co., 380 N. Main St., Mansfield, Ohio (2, 3, 4, 5)  
Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (1, 2, 3, 4, 5)  
Palme Co., Fullerton Ave. & Westgate Rd., Addison, Ill. (3)  
● **PORCELAIN PRODUCTS, INC.**, P. O. Box 300, Findlay, Ohio (2, 3, 4)—ADV. PG. 139  
Red Seal Electric Co., 6321 Detroit Ave., Cleveland 2, Ohio (4)  
Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa. (1, 2, 3, 4, 5)  
Southern Electrical Equipment Co., 308 W. Bland St., Charlotte 3, N. C. (2, 4)  
Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa. (2)  
Thomas & Sons Co., R., Lisbon, Ohio (2, 3, 4, 5)  
Utilities Service Co., 1 Pine St., Allentown, Pa. (1, 2, 3, 4, 5)  
Victor Insulators Div., I-T-E Circuit Breaker Co., Victor, N. Y. (2, 3, 5)

**CLEVISES, Crossarm**—see **CLEVISES, Dead Ending**

#### CLIMBERS, Pole

Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa.  
Buckingham Mfg. Co., Inc., 7-9 Travis Ave., Binghamton, N. Y.  
Industrial Products Co., 2695 N. Fourth St., Phila. 33, Pa.  
Klein & Sons, Mathias, 7200 McCormick Rd., Chicago 14, Ill.  
Miller Equipment Co., Inc., 13th & New Streets, Franklin, Pa.  
Mine Safety Appliances Co., 201 N. Braddock Ave., Pittsburgh 8, Pa.  
Utilities Service Co., 1 Pine St., Allentown, Pa.

**CLIPPERS, Hedge**—see **TRIMMERS**

#### CLIPS

1. Battery
2. Cable
3. Extension Cord Holding
4. Fuse
5. Guy Wire
6. Insulator Bracket
7. Test
8. Wire Rope

Black Mfg. Co., M., 300-08 N. Third St., Phila. 6, Pa. (1)  
Blitz Electric Co., 5713 Wentworth Ave., Chicago 21, Ill. (1, 2)  
Brewer-Titchener Corp., 111 Port Watson St., Cortland, N. Y. (8)  
Busmann Mfg. Co., 2536 W. University St., St. Louis 7, Mo. (4)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (1, 2, 3)  
Champion Cable Co., 1805 E. 40 St., Cleveland 3, Ohio (1, 2)  
Chasce Co., A. B., 210 N. Allen St., Centuria, Mo. (5)  
Dossert Mfg. Corp., 249-255 Huron St., Brooklyn 22, N. Y. (2, 5)  
Eastern Specialty Co., 3617 N. 8th St., Phila. 40, Pa. (7)  
Excel Fuse Co., 117 W. Erie St., Pittsburgh 12, Pa. (4)  
Federal Screw Products, Inc., 3917-25 N. Kedzie Ave., Chicago 18, Ill. (1)  
Federal Telephone and Radio Co., 100 Kingsland Rd., Clifton, N. J. (4)  
Frankel Connector Co., 27 Vestry St., N. Y. 13, N. Y. (1, 7)  
Goldak Co., 1344 W. Glenoaks Blvd., Glendale 1, Calif. (1)  
Green, Inc., R. H., 1201 24th St., Oakland 7, Calif. (6)  
Holub Industries, Inc., 442 Elm St., Sycamore, Ill. (2)  
Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa. (5, 8)  
Industrial Devices, Inc., Edgewater 19, N. J. (7)  
Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (3, 5, 8)  
Kearney Corp., James R., 4236 Clayton Ave., St. Louis 10, Mo. (5)  
Koltan Electric Mfg. Co., 123 New Jersey Railroad Ave., Newark 5, N. J. (4)  
Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif. (8)

Kulka Electric Mfg. Co. Inc., 633 S. Fulton Ave., Mount Vernon, N. Y. (4)  
Laughlin Co., Thomas, 143 Fore St., Portland 6, Maine (8)  
Line Material Co., 700 West Michigan St., Milwaukee, Wis. (5, 8)  
Malleable Iron Fittings Co., Branford, Conn. (5, 8)  
Meter Devices Co., 1001 Prospect Ave., S. W., Canton 6, Ohio (1, 4, 7)  
Midwest Electric Mfg. Co., 1639 Walnut St., Chicago 12, Ill. (2)  
Minerallic Electric Co., 25 N. Peoria St., Chicago 7, Ill. (2)  
Montgomery Tool Co., 7 Tichenor Lane, Newark 5, N. J. (8)  
Mueller Electric Co., 1583 E. 31 St., Cleveland 14, Ohio (1, 7)  
Multi Electric Mfg. Inc., 4223 W. Lake St., Chicago 24, Ill. (4)  
Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (5, 6, 8)  
Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (4)  
Penn-Union Electric Corp., 315 State St., Erie, Pa. (1, 2, 4, 5, 7)  
Rattan Mfg. Co., 10 Wall St. (P. O. Box 1745) New Haven 7, Conn. (2)  
Raytheon Mfg. Co., Equipment Marketing Div., 100 River St., Waltham 54, Mass. (4)  
Reliable Electric Co., 3145 Carroll Ave., Chicago 12, Ill. (7)  
Richards Co., J. R., P. O. Box 482, Carnegie, Pa. (2)  
Rodale Mfg. Co., Inc., 6th & Minor Sts., Emmaus, Pa. (1)  
S & C Electric Co., 4435 Ravenswood Ave., Chicago 40, Ill. (4)  
Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa. (5)  
Sittler Corp., 18 N. Ada St., Chicago 7, Ill. (2)  
Specialties, Inc., 2936 Sacramento St., Pittsburgh 4, Pa. (4)  
States Co., 19 New Park Ave., Hartford 6, Conn. (7)  
Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa. (2)  
Superior Fuse & Mfg. Co., Inc., 221 Hudson St., Hoboken, N. J. (4)  
Sylvania Electric Products, Inc., 1740 Broadway, N. Y. 19, N. Y. (4)  
Thepitt Mfg. Co., Gregg & Hammond Sts., Carnegie, Pa. (2)  
Timmerman Products, Inc., Dept. 16, P. O. Box 6688, Cleveland 1, Ohio (2, 8)  
Trico Fuse Mfg. Co., 2948 No. 5th St., Milwaukee 12, Wis. (1, 2, 7)  
U. S. Expansion Bolt Co., State St. & P.R.R., York, Pa. (8)  
Utilities Service Co., 1 Pine St., Allentown, Pa. (5, 8)  
Victor Instrument Mfg. Co. Inc., 33 W. 60 St., N. Y. 23, N. Y. (1)  
Wing Mfg. Co., L. J., Linden, N. J. (4)

**CLIPS, Misc.**

**Pipe**—see **STRAPS, Conduit**  
**Strain Relief**—see **RELIEFS, Strain**

#### CLOCKS

1. Master and Secondary
2. Program
3. Synchronous
4. Time
5. Time, Recording
6. Time, Watchman's

American District Telegraph Co., 155 Sixth Ave., N. Y. 13, N. Y. (6)  
Auth Electric Co., Inc., 34-20 45th St., L.I.C. 1, N. Y. (2, 3, 4)  
Automatic Temperature Control Co., Inc., 5212 Pulaski Ave., Phila. 44, Pa. (2)  
Bristol Co., Waterbury 20, Conn. (2)  
Cincinnati Time Recorder Co., 1733 Central Ave., Cincinnati 14, Ohio (1, 2, 3, 4, 5, 6)  
Cooper Hewitt Electric Co., 720-732 Grand St., Hoboken, N. J. (1, 2, 3, 4, 5, 6)  
Detex Watchclock Corp., 76 Varick St., N. Y. 13, N. Y. (6)  
Edwards Co., Inc., Norwalk, Conn. (2, 3, 4)  
Federal Sign & Signal Corp., 8726 S. State St., Chicago 19, Ill. (2)  
General Electric Co., Telechron Dept., Homer, Ave., Ashland, Mass. (1, 3)  
International Business Machines Corp., 590 Madison Ave., N. Y. 22, N. Y. (1, 2, 3, 4, 5)  
Latham Time Recorder Co., 76 Third St., N. W., Atlanta, Ga. (2, 3, 4, 5, 6)  
National Time & Signal Corp., 21800 Wyoming Ave., Detroit 37, Mich. (1, 2, 3)  
Northwestern Clock Co., 703 S. 16 St., Omaha 2, Neb. (2, 3)  
Penwood Numechron Co., 7249 Franktown Ave., Pittsburgh 8, Pa. (2, 3)  
Protection Equipment Co., Inc., 2924 Emerson Ave., S., (P. O. Box 96, Lake St. Branch), Minneapolis 8, Minn. (1)  
Quick Charge, Inc., 1750 N. E. 10th St., Oklahoma City 4, Okla. (4)  
Self-Winding Clock Co., Inc., 205-211 Willoughby Ave., Brooklyn 5, N. Y. (1, 2, 3)  
Simplex Time Recorder Co., Alice St., Gardner, Mass. (1, 2, 3, 4, 5, 6)  
Sperti Faraday, Inc., 1322 E. Church St., Adrian, Mich. (1, 2, 3, 6)  
Standard Electric Time Co., 129 Logan St., Springfield, Mass. (1, 2, 3)

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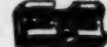
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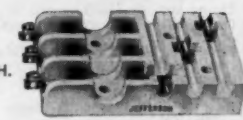
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Stromberg Time Corp., 135 S. Main St., Thomas, Conn. (1, 2, 3, 4, 5)  
Tork Clock Co. Inc., 1 Grove St., Mt. Vernon, N. Y. (4)  
Wisconsin Clock Co., 1561 W. Windlake Ave., Milwaukee, Wis. (4)  
Zenith Electric Co., 155 W. Walton St., Chicago 10, Ill. (2)

**CLOCKS, Misc.**

**Electrically Wound**—see **CLOCKS, Master and Secondary**  
**Stop**—see **TIMERS, Stop**

**CLOSERS, Door**—see **OPERATORS, Door and Gate**

#### CLUSTERS, Receptacle

Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill.  
Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif.

#### CLUTCHES

1. Electric
2. Magnetic

Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (1, 2)  
Dynamatic Div., Eaton Mfg. Co., Kenosha, Wis. (1, 2)  
General Riveters Inc., Electro-Mechanical Div., 785 Hertel Ave., Buffalo 7, N. Y. (1, 2)  
Globe Industries, Inc., 1784 Stanley Ave., Dayton 4, Ohio (1, 2)  
I.T.E. Circuit Breaker Co., 19th & Hamilton Sts., Phila. 30, Pa. (2)  
Robot Appliances, Inc., 7041 Orchard St., Dearborn, Mich. (1, 2)  
Stearns Magnetic Inc., 698 S. 28th St., Milwaukee 46, Wis. (2)  
Vickers Electric Div., Vickers, Inc., 1047 Locust St., St. Louis 3, Mo. (2)  
Warner Electric Brake & Clutch Co., Belsit, Wis. (1, 2)

**CODES, Label**—see **MARKERS**

#### COILS

1. Magnetic Solenoid
2. Motor and Generator
3. Transformer

American Relay & Controls, Inc., 3621 Howard St., Skokie, Ill. (1)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (1, 3)

Coil Co. of America, Inc., 8 Washington St., Northvale, N. J. (1, 3)  
 Connecticut Telephone & Electric Corp., 70 Britannia St., Meriden, Conn. (1)  
 Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (1)  
 Dormeyer Industries, 3418 Milwaukee Ave., Chicago 41, Ill. (1, 3)  
 Electrical Facilities, Inc., 4224 Holden St., Oakland 8, Calif. (1, 3)  
 Electrical Windings, Inc., 2015 N. Kolmar Ave., Chicago 39, Ill. (1, 3)  
 Electro Devices, Inc., 4025 Easton Ave., St. Louis 13, Mo. (1)  
 Federal Telephone and Radio Co., 100 Kingsland Rd., Clifton, N. J. (1, 3)  
 Ferantli Electric, Inc., 30 Rockefeller Plaza, N. Y. 20, N. Y. (3)  
 Freed Transformer Co., Inc., 1718 Weirfield St., Brooklyn 27, N. Y. (3)  
 General Armature & Mfg. Co., P. O. Box 370, Lock Haven, Pa. (2)  
 Guardian Electric Mfg. Co., 1621 W. Walnut St., Chicago 12, Ill. (1)  
 Hallett Mfg. Co., 1601 W. Florence Ave., Inglewood, Calif. (2)  
 Hi-Spec Mfg. Co., Inc., 413 Market St., Newark 5, N. J. (1, 3)  
 Hindle Transformer Co., Inc., Woods Church Rd., Flemington, N. J. (1, 3)  
 Kuhlman Electric Co., 1000 26th St., Bay City, Mich. (3)  
 Kupfrin Mfg. Corp., 395 State St., Binghamton, N. Y. (1)  
 Langevin Mfg. Corp., 37 W. 65 St., N. Y. 23, N. Y. (1, 3)  
 Lee Electric, Inc., 132 Beckwith Ave., Paterson, N. J. (1, 3)  
 Magnetics, Inc., Box EPG, Butler, Pa. (3)  
 National Acme Co., Electrical Mfg. Div., 170 E. 131 St., Cleveland 8, Ohio (1)  
 Onite Mfg. Co., 3601 Howard St., Skokie, Ill. (1)  
 Opad Electric Co., 69 Murray St., New York 7, N. Y. (1)  
 Partrick & Wilkins Co., 51 N. Seventh St., Phila., 6, Pa. (1)  
 Quick Charge, Inc., 1750 N. E. 10th St., Oklahoma City 4, Okla. (1, 3)  
 R T & E Co., 1900 E. North St., Waukesha, Wis. (3)  
 SNC Mfg. Co., Inc., P. O. Box 277, Oshkosh, Wis. (1, 2, 3)  
 Square D Co., 6060 Rivard St., Detroit 11, Mich. (1)  
 Standard Electronic Corp., 285 Emmet St., Newark 5, N. J. (3)  
 Star-Kimble Motor Div., Miehle Printing Press & Mfg. Co., 200 Bloomfield Ave., Bloomfield, N. J. (2)  
 Stimpel & Ward Co., P. O. Box 5806, Pittsburgh 9, Pa. (2)  
 Stratfield Co., 434 Grand St., Bridgeport 4, Conn. (1)  
 Thordarson-Meissner Mfg. Div., Maguire Industries, Inc., Seventh & Belmont Sts., Mt. Carmel, Ill. (1, 3)  
 Trindl Products, Ltd., 1807-11 S. Clark St., Chicago 16, Ill. (3)  
 United States Electronics Corp., 275 Warren St., Lyndhurst, N. J. (1, 3)  
 Wheeler Insulated Wire Co., 150 E. Aurora St., Waterbury 20, Conn. (1, 2, 3)

#### COILS, Misc.

**Choke**—see **REACTORS**, Current Limiting  
**Reactance**—see **REACTORS**, Current Limiting

#### COLLARS, Fixture

Eagle Mfg. Co., 3508 Avalon Blvd., Los Angeles 11, Calif.  
 Yorkville Metal Products Co., 677 Broadway, N. Y. 12, N. Y.

#### COLLARS, Floor Box—see **NOZZLES**, Floor Box

#### COLLECTORS, Dust

Allington & Curtis Mfg. Co., 1810 Holland Ave., Saginaw 17, Mich.  
 Koppers Co., Inc., Koppers Bldg., Pittsburgh 19, Pa.  
 Mine Safety Appliances Co., 201 N. Braddock Ave., Pittsburgh 8, Pa.  
 Northern Blower Co., 6433 Barberton Ave., Cleveland 2, Ohio  
 Research-Cottrell, Inc., Bound Brook, N. J.  
 Thermobloc Div., Prat-Daniel Corp., 2 Meadow St., South Norwalk, Conn.  
 Torit Mfg. Co., 292 Walnut St., St. Paul 2, Minn.  
 Young & Berke Co., 2277 Buck St., Cincinnati 22, Ohio

#### COLLECTORS, Static—see **CAPACITORS**, Electrostatic

#### COLORING AND FROSTING, Lamp

McKay Chemical Co., Inc., 880 Pacific St., Brooklyn 38, N. Y.

#### COMELONGS—see **GRIPS**, Cable and Wire; **PULLERS**, Slack

#### COMMUTATORS

Cameron Electrical Mfg. Co., 205 Main St., Ansonia, Conn.  
 Chicago Commutator, Inc., 325 W. Ohio St., Chicago 10, Ill.

Cleveland Commutator Div., Borg-Warner Corp., Box 394, Old Mansfield Rd., Wooster, Ohio  
 Dayton Precision Mfg. Co., 213 N. Beckel St., Dayton 3, Ohio  
 Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo.  
**KIRKWOOD COMMUTATOR CO.**, 4855 W. 130 St., Cleveland 11, Ohio—ADV. PG. 133  
 Seager Standard Carbon Co., 291 Church St., New York 13, N. Y.  
 Star-Kimble Motor Div., Miehle Printing Press & Mfg. Co., 200 Bloomfield Ave., Bloomfield, N. J.  
 Toledo Commutator Co., Owosso, Mich.

#### COMPENSATORS

1. Line Drop
2. Motor Starting

Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee 4, Wis. (2)  
 Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (1, 2)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2)  
 Raytheon Mfg. Co., Equipment Marketing Div., 100 River St., Waltham 54, Mass. (3)

#### COMPENSATORS, Series Lamp—see **TRANSFORMERS**, (Classified as to Design), Auto

#### COMPOUNDS

1. Armature Washing
2. Brush Sealing
3. Cable Protectant
4. Cable Pulling
5. Commutator Lubricating
6. Fungicidal
7. Glass Etching
8. Heating Element Repair
9. Impregnating
10. Insulating
11. Luminous
12. Molding
13. Radium
14. Rust and Corrosion Preventive
15. Wire Finishing
16. Wood Preservative

Arsco Mfg. & Sales Corp., 451 Tenth Ave., New York 18, N. Y. (3)  
 Barrett Div., Allied Chemical & Dye Corp., 40 Rector St., New York 6, N. Y. (12)  
 Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y. (4, 10)  
 Bishop Mfg. Corp., 10 Canfield Rd., Cedar Grove, N. J. (10)  
 Bisonite Co., Inc., P. O. Box 84, Kenmore Station, Buffalo 17, N. Y. (10, 14)  
 Blackburn Corp., Jasper, 35 Madison St., St. Louis 6, Mo. (14)



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No. 31-252 2 gal.	No. 31-256 55 gal.

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 Canadian Radium & Uranium Corp., 630 Fifth Ave., New York 20, N. Y. (11, 13)  
 Carbolinum Wood Preserving Co., 528 W. Highland Ave., Milwaukee 3, Wis. (16)  
 Carey Mfg. Co., Philip, Cincinnati 15, Ohio (10)  
 Chance Co., A. B., 210 N. Allen St., Centralia, Mo. (3)  
 Co-operative Utilities Co., Inc., 4637-39 Mulberry St., Phila. 24, Pa. (2)  
 Cool-Amp Co., 8603 W. 17 Ave., Portland 19, Ore. (14)  
 Dow Corning Corp., P. O. Box 592, Midland, Mich. (9, 10, 12, 14)  
 Electro Compound Co., 4145 W. 150 St., (P. O. Box 2772), Cleveland 11, Ohio (4)  
 Ellanar Chemical Co., 2308 Oakton St., Evanston, Ill. (10)  
 Fluorocarbon Products Div., United States Gasket Co., 602 N. 10 St., (P. O. Box 93), Camden 1, N. J. (10)  
 G & W Electric Specialty Co., 7780 Dante Ave., Chicago 19, Ill. (10)  
 Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (10)  
 General Electric Co., Chemical & Metallurgical Div., Pittsfield, Mass. (9, 10, 12)  
 General Electric Co., Chemical & Metallurgical Div., Watertown, N. Y. (9, 10)  
 Gulf Refining Co., Gulf Oil Corp., 1822 Gulf Bldg., Pittsburgh 30, Pa. (4, 5, 9, 10, 14)  
 Irvington Varnish and Insulator Div., Minnesota Mining and Mfg. Co., 6 Argyle Terrace, Irvington 11, N. J. (9, 10)  
 Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill. (2, 4, 10)  
 Javex, P. O. Box 646, Redlands, Calif. (9, 10, 12)  
 Koppers Co., Inc., Koppers Bldg., Pittsburgh 19, Pa. (14, 16)  
 Lubriplate Div., Fiske Brothers Refining Co., 129 Lockwood St., Newark 5, N. J. (14)  
 Mallinckrodt Chemical Works, 2nd & Mallinckrodt Sts., St. Louis 7, Mo. (6, 11)  
 Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio (1, 2)  
 Mineralac Electric Co., 25 N. Peoria St., Chicago 7, Ill. (4, 10)  
 Minnesota Mining and Mfg. Co., Electrical Products Div., 500 Fauquier Ave., St. Paul 6, Minn. (9, 10)  
 Northwoods Mfg. Chemists, Inc., Porterfield, Wis. (6, 16)  
 Norton Co., 1 New Bond St., Worcester 6, Mass. (10)  
 O. Z. Electrical Mfg. Co., Inc., 262 Bond St., Brooklyn 17, N. Y. (10)  
 Okun Co., A. L., 109-02 Van Wyck Expressway, L. I. 20, N. Y. (14)



Osmose Wood Preserving Co. of America, Inc., 980 Elliot St., Buffalo 9, N. Y. (16)  
 Plymouth Rubber Co., Inc., 23 Revere St., Canton, Mass. (10)  
 Preformed Line Products Co., 5349 St. Clair Ave., Cleveland 3, Ohio (14)  
 Rogers Corp., Rogers, Conn. (12)  
 Rusgreen Mfg. Co., 14262 Birwood Ave., Detroit 38, Mich. (10)  
 Sauereisen Cements Co., 1045 N. Canal St., Pittsburgh 15, Pa. (8, 10)  
 Sherwin-Williams Co., 101 Prospect Ave., N. W., Cleveland 1, Ohio (9, 10, 16)  
 Sierra Electric Corp., 35100 S. Figueroa, Gardena, Calif. (1)  
 Trotter & Co., E. T., 594 Johnson Ave., Brooklyn 37, N. Y. (3, 10, 15)  
 Turco Products, Inc., 6135 S. Central Ave., Los Angeles 1, Calif. (14)  
 United States Radium Corp., 535 Pearl St., New York 7, N. Y. (11, 13)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (9, 10)

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2. **Cable**
3. **Conduit**
4. **Duct**
5. **Pothole**

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 Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa. (2)  
 Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. (3)  
 Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y. (2, 3, 4)  
 Bisonite Co., Inc., P. O. Box 84, Kenmore Station, Buffalo 17, N. Y. (1, 5)  
 Borthing Co., Inc., Geo. C., P. O. Box 115 B, East Rutherford, N. J. (5)  
 Crouse-Hinds Co., Syracuse 1, N. Y. (3)  
 Dow Corning Corp., P. O. Box 592, Midland, Mich. (2)  
 Electrical Engineers Equipment Co., 25th Ave., & Division St., Melrose Park, Ill. (5)  
 Exide Industrial Div., Electric Storage Battery Co., 42 S. 15 St., Phila. 2, Pa. (1)  
 G. & W. Electric Specialty Co., 7780 Dante Ave., Chicago 19, Ill. (5)  
 Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (2, 3)  
 General Electric Co., Chemical & Metallurgical Div., Pittsfield, Mass. (5)  
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 Johns-Manville, 22 E. 40 St., New York 16, N. Y. (4)

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 Mitchell Rand Insulation Co., 51 Murray St., N. Y. 7, N. Y. (1, 2, 3, 4, 5)  
 Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla. (2, 5)  
 Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (3)  
 Richards Co., J. R., P. O. Box 482, Carnegie, Pa. (2, 4)  
 Rusgreen Mfg. Co., 14262 Birwood Ave., Detroit 38, Mich. (2, 5)  
 Russell & Stoll Co., Inc., 125 Barclay St., N. Y. 7, N. Y. (3)  
 Sauereisen Cements Co., 1045 N. Canal St., Pittsburgh 15, Pa. (5)  
 Sherwin-Williams Co., 101 Prospect Ave., N. W., Cleveland 1, Ohio (5)

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Cable Filling—see COMPOUNDS, Insulating  
 Soldering—see FLUX, Soldering  
 Terminal—see COMPOUNDS, Insulating  
 Wire Stripping—see STRIPPERS, Wire

#### CONDENSERS—see CAPACITORS

#### CONDENSERS, Refrigeration

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 Baltimore Aircoil Co., Inc., 2615-35 Mathews St., Baltimore 18, Md.  
 Brunner Mfg. Co., 1821 Broad St., Utica, N. Y.  
 Frick Co., Waynesboro, Pa.  
 Frigidaire Div., General Motors Corp., 300 Taylor St., Dayton 1, Ohio  
 Lennox Furnace Co., Marshalltown, Iowa  
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 Tecumseh Products Co., Tecumseh, Mich.  
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6. Copper Alloy
7. EMT
8. EMT, Plastic Coated
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 Atlantic Metal Hose Co., Inc., 308 Dyckman St., New York 34, N. Y. (10)  
 Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y. (4)  
 Brown Company, 150 Causeway St., Boston, Mass. (9)  
 Carlon Products Corp., 10279 Meech Ave., Cleveland 5, Ohio (13)  
 Chester Cable Corp., Oakland Ave., Chester, N. Y. (10, 11)  
 ● CLIFTON CONDUIT CO., INC., 75 Montgomery St., Jersey City 2, N. J. (7, 10, 11, 14)—ADV. PG. 115  
 Co-operative Industries, Inc., 100 Oakdale Rd., Chester, N. J. (10, 11)  
 Columbia Cable & Electric Corp., 255 Chestnut St., Brooklyn 8, N. Y. (1, 10, 11)  
 Dekoron Tubing Div., Samuel Moore and Co., Main & Orchard Sts., Mantua, Ohio (8)  
 Ettco Wire & Cable Corp., 75 Onderdonk Ave., Brooklyn 37, N. Y. (10)  
 Flexonics Corp., 1430 S. Third Ave., Maywood, Ill. (10)  
 ● GENERAL ELECTRIC CO., CONSTRUCTION MATERIALS DIV., 1285 Boston Ave., Bridgeport 2, Conn. (7, 14)—ADV. PG. 150  
 ● GRAYBAR ELECTRIC CO., INC., 420 Lexington Ave., N. Y. 17, N. Y. (7, 9)—ADV. PG. 2  
 Hallett Mfg. Co., 1601 W. Florence Ave., Inglewood, Calif. (10)  
 Insulated Duct & Cable Co., Inc., Homestead & Stokes Ave., Trenton 5, N. J. (12)  
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Hot-Dip Galvanized with  
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**Rigid Steel Conduit—**  
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Bldg., Pittsburgh 19, Pa. (15)  
Laclede Steel Co., Arcade Bldg., St. Louis 1,  
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Line Material Co., 700 West Michigan St.,  
Milwaukee, Wis. (9)  
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12, 14)  
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Orangeburg Mfg. Co., Inc., Orangeburg, N. Y. (9)  
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Reynolds Metals Co., 2500 S. 3rd St., Louisville 1,  
Ky. (1)  
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(7, 14)—ADV. PG. 122-123  
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port 2, Conn. (1)  
Burndy Engineering Co., Inc., Norwalk, Conn. (2)  
Cable Electric Products, Inc., 234 Daboll St.,  
Providence 7, R. I. (1)  
Cannon Electric Co., 3209 Humboldt St., Los An-  
geles 31, Calif. (2)  
Capitol Stage Lighting Co., Inc., 527 W. 45 St.,  
New York 36, N. Y. (3)  
Champion Cable Co., 1806 E. 40 St., Cleveland  
3, Ohio (2)  
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South, Long Island City 1, N. Y. (1)  
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38, N. Y. (3)  
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Rodalie Mfg. Co., Inc., 6th & Minor Sts., Emmaus,  
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Trico Fuse Mfg. Co., 2948 No. 5th St., Milwaukee  
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5. Pressure, Multiple

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**503 NYCAP**  
Nylon Insulated  
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Permits a fixture tap-off without additional wires — one circuit wire passes through bushing cap.



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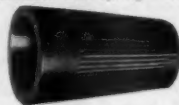
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Blonder-Tongue Laboratories, Inc., 526-36 North Ave., Westfield, N. J. (2)  
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Cannon Electric Co., 3209 Humboldt St., Los Angeles 31, Calif. (4, 8)  
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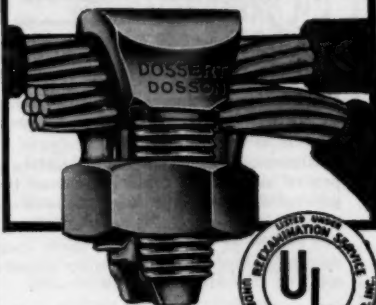
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The new kind of crimp connector that gives you a perfect prefabricated insulating job every time. Insulates all around the joint and between the wires; gives double protection over sleeve and wire ends. Deep skirt completely covers bare conductor, even when wires are not stripped evenly.

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• **RODALE MFG. CO., INC.**, 6th & Minor Sts., Emmaus, Pa. (1)—ADV. PG. 143

Roller, Inc., Wm. G., 159 Liberty Ave., Mineola, N. Y. (1)

Royal Electric Co., Inc., 95 Grand Ave., Pawtucket, R. I. (1)

Royal Electric Mfg. Co., 1122 E. 87 St., Chicago 19, Ill. (3, 5, 8)

Sherman Mfg. Co., H. B., 22 Barney, Battle Creek, Mich. (6, 8)

Slater Electric & Mfg. Co., Inc., 56th St. & 37 Ave., Woodside 77, N. Y. (1)

Spero Electric Corp., 20500 St. Clair Ave., Cleveland 17, Ohio (1)

Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa. (1)

Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (1)

Superior Fuse & Mfg. Co., Inc., 221 Hudson St., Hoboken, N. J. (8)

Thelitt Mfg. Co., Gregg & Hammond Sts., Carnegie, Pa. (1)

Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J. (1, 2, 5, 6, 7, 8)

Unimatic Corp., Sherwood Lane, Caldwell Township, N. J. (1)

Vaco Products Co., 317 E. Ontario St., Chicago 11, Ill. (6, 8)

Wagner Mfg. Co., Inc., 350 W. Adams St., Jackson, Mo. (7)

Weaver Co., J. A., 2110 Howard St., St. Louis 6, Mo. (6, 8)

Whitney Blake Co., 1565 Dixwell Ave., Hamden, Conn. (2, 4, 5, 8)

**CONNECTORS, Misc.**

Bus Expansion—see **JOINTS**, Expansion, Bus Cord, Separable—see **CAPS**, Attachment Plug; **BASES**, Attachment Plug

Grounding—see **CLAMPS**, Wiring, Ground Sleeve Type—see **SLEEVES**, Splicing; **SPLICES**, Line

Solder Type—see **LUGS** and **TERMINALS**, Cable and Wire

See also **FITTINGS**

**CONTACTORS**

1. Magnetic
2. Magnetic, Oil Immersed
3. Motor Accelerating

Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee 4, Wis. (1)

Allied Control Co., Inc., 2 East End Ave., New York 21, N. Y. (1)

Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (1, 2, 3)

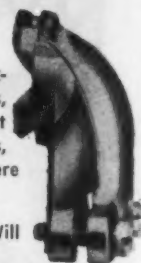
Automatic Switch Co., 391 Lakeside Ave., Orange, N. J. (1, 3)

# HARBOT CONNECTORS

**FOR ARMORED CABLE  
INSTALLATIONS**

Fit quickly, easily into knock-out boxes, switches, outlets, motors (with or without threaded holes), junctions, fixtures, practically anywhere BX armored cable is used.

Will not vibrate loose. Will not spark or rust.



**MADE OF HIGH STRENGTH ALUMINUM  
ALLOY, HARBOT CONNECTORS ARE—**

- Simple in principle. Operate as cam-wedge
- Installed from outside after wiring is complete
- Simplicity of installation saves time
- Positive positioning always assured
- Need no washers, wrenches or lock nuts. Only a screw driver
- 25 different models, 45 and 50 degree and straight
- Fit box walls 3/64" to 5/16". Fit standard 1/2" I.P.S. female threads U.L. & C.S.A. Approved.

**UNIMATIC CORPORATION**

Sherwood Lane Caldwell Township, N. J.

B/W Controller Corp., 2200 E. Maple Rd., Birmingham, Mich. (1)

Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (1, 2, 3)

Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (1, 2, 3)

Ebert Electronics Corp., 212-26 Jamaica Ave., Queens Village 28, L. I., N. Y. (1)

Electric Controller & Mfg. Co., 4493 Lee Rd., Cleveland 28, Ohio (1, 2, 3)

Federal Pacific Electric Co., 50 Paris St., Newark 5, N. J. (1)

Furnas Electric Co., 1067 McKee St., Batavia, Ill. (1)

General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 3)

H-B Instrument Co., American & Bristol Sts., Philadelphia 40, Pa. (1)

Hartman Electrical Mfg. Co., 175 N. Diamond St., Mansfield, Ohio (1)

Industrial Engineering & Equip. Co., Inc., 711 S. Theresa, St. Louis 3, Mo. (1)

Minneapolis-Honeywell Regulator Co., Fourth Ave. S., Minneapolis 6, Minn. (3)

Murphy Elevator Co., Inc., 128 E. Main St., Louisville 2, Ky. (1)

Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla. (1, 2)

Pereny Equipment Co., 893 Chambers Rd. (Station A, Box 153), Columbus, Ohio (1)

R-B-M Div., Essex Wire Corp., 131 Godfrey St., Logansport, Ind. (1)

Rowan Controller Co., 2315 Homewood Ave., Baltimore 18, Md. (2)

Safety Car Heating and Lighting Co., Inc., P. O. Box 904, New Haven 4, Conn. (1)

Vickers Electric Div., Vickers, Inc., 1847 Locust St., St. Louis 3, Mo. (1)

Ward Leonard Electric Co., 115 MacQuesten Parkway, South, Mount Vernon, N. Y. (1, 3)

Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (2, 3)

Wiegand Co., Edwin L., 7637 Thomas Blvd., Pittsburgh 8, Pa. (1)

Zenith Electric Co., 155 W. Walton St., Chicago 10, Ill. (1)

**CONTACTS**

1. Controller
2. Powdered Metal
3. Precious Metal

Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (1)

American Silver Co., Inc., Industrial Div., 36-07 Prince St., Flushing 54, N. Y. (3)

Baker & Co., Inc., 113 Astor St., Newark 5, N. J. (3)

Brainin Co., C. S., 320 Washington St., Mt. Vernon, N. Y. (1, 2, 3)  
 Carbon Engineering Corp., Slinger, Wis. (1)  
 Carbone Corp., 400 Myrtle Ave., Boonton, N. J. (2, 3)  
 Chapin Co., Inc., Chas. E., 227 Fulton St., N. Y. 7, N. Y. (1, 2)  
 General Carbon Co., 320 North Stenger St., Naperville, Ill. (2)  
 General Electric Co., Carboly Dept., 11177 E. 8 Mile Rd., Detroit 32, Mich. (2)  
 General Electric Co., Chemical & Metallurgical Div., Carboly Dept., 11177 E. 8 Mile Rd., Detroit 32, Mich. (2)  
 Gibson Electric Co., 8337 Frankstown Ave., Pittsburgh 21, Pa. (1, 2, 3)  
 Makepeace Co. Div., D. E., Union Plate & Wire Co., Pine & Dunham Sts., Attleboro, Mass. (3)  
 Metals & Controls Corp., General Plate Div., 34 Forest St., Attleboro, Mass. (3)  
 Murphy Elevator Co., Inc., 128 E. Main St., Louisville 2, Ky. (1)  
 Pure Carbon Co., Inc., 441 Hall Ave., St. Marys, Pa. (2)  
 Rowan Controller Co., 2315 Homewood Ave., Baltimore 18, Md. (1)  
 Russell Mfg. Co., Inc., R. V., 814 Bath Ave., Niagara Falls, N. Y. (1)  
 St. Marys Carbon Co., State St., St. Marys, Pa. (2, 3)  
 Square D Co., 6060 Rivard St., Detroit 11, Mich. (1)  
 Stackpole Carbon Co., Tannery St., St. Marys, Pa. (2, 3)  
 Steel Co., Herman D., 225 Lafayette Bldg., Phila. 6, Pa. (1)  
 Superior Carbon Products Co., 9115 George Ave., Cleveland 5, Ohio (1, 2, 3)  
 Waveland Electric Co., 5542 N. Ashland Ave., Chicago 40, Ill. (1)

#### CONTACTS, Misc.

Foot Rest—see **ALARMS, Burglar and In-  
 trusion, Manual; SWITCHES, Control,  
 Manual, Foot, Door Mnt**  
 Laminated—see **CONTACTS, Precious Metal**  
 See also **SWITCHES; RELAYS**

#### CONTROLLERS

1. Fence Charging
2. Frequency and Load
3. Street Lighting
4. Tachometric

Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (2)  
 Arga Div., Beckman Instruments, Inc., 220 Pasadena Ave., South Pasadena, Calif. (2)  
 Bristol Co., Waterbury 20, Conn. (2, 4)  
 Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (2)  
 Fisher-Pierce Co., Inc., 170 Pearl St., South Braintree, Mass. (3)  
 General Control Co., 1200 Soldiers Field Rd., Boston 34, Mass. (2)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (2, 3)  
 Kees Mfg. Co., F. D., P. O. Box 537, Beatrice, Neb. (1)  
 Madison Electric Products, Inc., 119 Lake St., Madison, Ohio (4)  
 Magnetic Amplifiers, Inc., 632 Tinton Ave., N. Y. 55, N. Y. (2, 3)  
 Nepo Mfg. Co., 6025 N. Keystone Ave., Chicago 30, Ill. (3)  
 Parker McCrory Mfg. Co., 2609 Walnut St., Kansas City 8, Mo. (1)  
 Wac Engineering Co., 35 S. St. Clair St., Dayton 2, Ohio (4)  
 Ward Lennard Electric Co., 115 MacDuesten Parkway, South Mount Vernon, N. Y. (2, 3, 4)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (2, 3)  
 Worner Electronic Devices, Rankin, Ill. (3)

#### CONTROLLERS, Motor

1. Electronic
2. Hazardous Location
3. Magnetic
4. Manual
5. Speed Regulating

Accurate Engineering Co., 2005 Blue Island Ave., Chicago 8, Ill. (5)  
 Airgard Mfg. Co., 362 W. Erie St., Chicago 10, Ill. (4, 5)  
 Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee 4, Wis. (2, 3, 4, 5)  
 Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (2, 3, 4, 5)  
 Arrow-Hart & Hegeman Electric Co., 103 Hawthorn St., Hartford 6, Conn. (3, 4, 5)  
 Assembly Products, Inc., Chesterland 31, Ohio (5)  
 B/W Controller Corp., 2200 E. Maple Rd., Birmingham, Mich. (3)  
 Balfor Electric Co., 4353 Duncan Ave., St. Louis 10, Mo. (5)  
 Bristol Co., Waterbury 20, Conn. (1, 2, 3, 5)  
 Carson Mfg. Co., Inc., 1804 E. 30 St., Indianapolis 18, Ind. (5)  
 Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (1, 2, 3, 4, 5)  
 Continental Electric Equipment Co., Box 1055, Cincinnati 1, Ohio (3)  
 ● **CROUSE-HINDS CO.**, Syracuse 1, N. Y. (2)—ADV. PG. 116-117  
 Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis.  
 Ebert Electronics Corp., 212-26 Jamaica Ave., Queens Village 28, L. I., N. Y. (1, 2, 3)

Electric Controller & Mfg. Co., 4493 Lee Rd., Cleveland 28, Ohio (2, 3)  
 Electric Machinery Mfg. Co., 800 Central Ave., Minneapolis 13, Minn. (3, 4)  
 Euclid Electric & Mfg. Co., 50 Edwards St., Madison, Ohio (2, 3, 4, 5)  
 Federal Pacific Electric Co., 50 Paris St., Newark 5, N. J. (1, 2, 3, 4, 5)  
 Federal Telephone and Radio Co., 100 Kingsland Rd., Clifton, N. J. (1, 3)  
 Ferrara, Inc., 8106 W. Nine Mile Rd., Oak Park 37, Mich. (1, 5)  
 Furnas Electric Co., 1067 McKee St., Batavia, Ill. (3, 4)  
 General Control Co., 1200 Soldiers Field Rd., Boston 34, Mass. (1)  
 General Controls Co., 801 Allen Ave., Glendale, Calif. (1, 3)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 3, 4, 5)  
 General Electric Co., Trumbull Components Dept., 41 Woodford Ave., Plainville, Conn. (4)  
 General Nuclear Corp., 550 Fifth Ave., New York 27, N. Y. (5)  
 General Radio Co., 275 Massachusetts Ave., Cambridge 39, Mass. (5)  
 Globe Industries, Inc., 1784 Stanley Ave., Dayton 4, Ohio (5)  
 Hart Mfg. Co., 110 Bartholomew Ave., Hartford, Conn. (3, 4)  
 Heinemann Electric Co., Pennsylvania Ave. & Plum St., Trenton 2, N. J. (4)  
 Ideal Electric and Mfg. Co., East First St., Mansfield, Ohio (3, 4)  
 International Business Machines Corp., 590 Madison Ave., N. Y. 22, N. Y. (1)  
 Machinery Electrification, Inc., Northboro, Mass. (1)  
 Magnetic Amplifiers, Inc., 632 Tinton Ave., N. Y. 55, N. Y. (1, 3, 4, 5)  
 Manning, Maxwell & Moore, Inc., 250 E. Main St., Stratford, Conn. (5)  
 National Acme Co., Electrical Mfg. Div., 170 E. 131 St., Cleveland 8, Ohio (4)  
 Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla. (2, 3)  
 Ohmite Mfg. Co., 3601 Howard St., Skokie, Ill. (5)  
 Oviatt Co., D. C., 2174 Lakeside Ave., Cleveland 14, Ohio (3)  
 Peschel Electronics, Inc., 13 Garden St., New Rochelle, N. Y. (1)  
 Pryne & Co., Inc., 140 N. Towne Ave. (P. O. Box 698), Pomona, Calif. (5)  
 Rowan Controller Co., 2315 Homewood Ave., Baltimore 18, Md. (2, 3, 4)  
 ● **RUSSELL & STOLL CO., INC.**, 125 Barclay St., New York 7, N. Y. (2, 4)—ADV. PG. THIRD COVER  
 Square D Co., 6060 Rivard St., Detroit 11, Mich. (1, 2, 3, 4, 5)  
 Tech Labs Inc., Bergen & Edsall Blvds., Palisades Park, N. J. (1)

## MOTOR CONTROLS



CR7006 a-c  
magnetic starter,  
cover removed

CR7006 magnetic motor starters are used for full-voltage starting of squirrel-cage induction motors, 1-100 hp, 600 volts, 60-25 cycles. They consist of a 2- or 3-pole magnetically operated contactor, with overload relays, mounted on a base, open or enclosed in a suitable enclosure. The CR7006 is sturdy and dependable, provides undervoltage and thermal overload protection, and may be operated by means of a push-button station, float switch, or other pilot device. G.E. has available a complete line of motor controls.

Consult classified section of phone book for address of nearest G-E Apparatus Agent-Distributor, or write direct to General Electric Co., Section 640-356, Schenectady 5, N. Y.

**GENERAL ELECTRIC**



## COMPLETE LINE FEDERAL NOARK® MOTOR CONTROLS

Check the outstanding features of the Federal Noark: Bul. 404 Manual AC motor starter. Bul. 502 AC magnetic contactors and Relays. Bul. 504 magnetic AC across-the-line motor starters. Bul. 514 combination motor starters. Bul. 524 reversing starters. Magnetic multi-speed starters, reduced voltage magnetic starters. Standard heavy duty and oiltight Push-button Stations.

Write for detailed bulletins.

## FEDERAL PACIFIC ELECTRIC COMPANY

FORMERLY FEDERAL ELECTRIC  
PRODUCTS COMPANY

50 PARIS STREET • NEWARK 1, N. J.

Ther Electric & Machine Works, 17 S. Jefferson St., Chicago 6, Ill. (3, 4, 5)  
 Thompson, Inc., 44-18 Purvis St., Long Island City 1, N. Y. (3)  
 Vickers Electric Div., Vickers, Inc., 1847 Locust St., St. Louis 3, Mo. (5)  
 Wac Engineering Co., 35 S. St. Clair St., Dayton 2, Ohio (1, 5)  
 Watson Elevator Co., Inc., 220 S. Main St., Warsaw, N. Y. (3)  
 Weltronix Co., 19500 W. Eight Mile Rd., Detroit 19, Mich. (1)  
 West Wind Corp., 1800 Airport Way, Seattle 4, Wash. (5)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2, 3, 4, 5)  
 Zenith Electric Co., 155 W. Walton St., Chicago 10, Ill. (3)

#### CONTROLLERS, Misc.

Crane—see **CONTROLLERS, Motor, Manual**  
 Smoke—see **INDICATORS, Smoke Density**  
 Furnace Temperature—see **REGULATORS, Temperature, Furnace**  
 Peak Load—see **CONTROLS, Demand Limiting**  
 Time Cycle—see **TIMERS, Stop and Repeat Cycle**  
 Traffic—see **SIGNALS, Traffic**  
 See also **CONTROLS; CONTACTORS; STARTERS; SWITCHES**

#### CONTROLS

1. Air Raid Alarm
2. Color Register
3. Demand Limiting
4. Gas Pilot
5. Humidity
6. Illumination
7. Liquid Level
8. Oil Burner
9. Oil Burner Flame
10. Overload, Electronic
11. Registration and Alignment, Electronic
12. Temperature, Electronic
13. Textile Weaving
14. Welding, Electronic

A-P Controls Corp., 2450 N. 32 St., Milwaukee 45, Wis. (4, 9)  
 Airserco Mfg. Co., Inc., 435 Melwood St., Pittsburgh 13, Pa. (1, 2)  
 Alco Valve Co., 865 Kingsland Ave., St. Louis 5, Mo. (7)  
 Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee 4, Wis. (7)  
 Arrow-Hart & Hegeman Electric Co., 103 Hawthorn St., Hartford 6, Conn. (8)

Assembly Products, Inc., Chesterland 31, Ohio (9, 12)  
Automatic Control Co., 995 University Ave., St. Paul 4, Minn. (7)  
Automatic Devices Co., Inc., 714 Hillgrove Ave., Western Springs, Ill. (8, 12)  
Automatic Switch Co., 391 Lakeside Ave., Orange, N. J. (4, 10)  
Automatic Temperature Control Co., Inc., 5212 Pulaski Ave., Phila. 44, Pa. (7)  
Autotone Co., 125 W. Main St., Danville, Ill. (10)  
B/W Controller Corp., 2200 E. Maple Rd., Birmingham, Mich. (7)  
Bahson Co., 1001 S. Marshall St., Winston-Salem, N. C. (5)  
Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland 8, Ohio (7, 12)  
Barber-Colman Co., P. O. Drawer 99, 1300 Rock St., Rockford, Ill. (5, 8, 9, 12)  
Bristol Co., Waterbury 20, Conn. (4, 5, 7, 9, 10, 12, 14)  
Bryant Electric Co., Box D Barnum Station, Bridgeport 2, Conn. (8)  
Carson Mfg. Co., Inc., 1804 E. 30 St., Indianapolis 18, Ind. (8)  
Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (7, 14)  
Cooper Co., Inc., Clark, 317 N. Market St., Palmyra, N. J. (7, 12)  
Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (7, 13)  
Deitch Oven Co., 619 S. E. 8th St., Minneapolis 14, Minn. (12)  
Doelcan Div., Minneapolis-Honeywell Reg. Co., 1400 Soldiers Field Rd., Boston 35, Mass. (12)  
Dunham Co., G. A., 400 W. Madison St., Chicago 6, Ill. (12)  
Ebert Electronics Corp., 212-26 Jamaica Ave., Queens Village 28, L. I., N. Y. (14)  
Eisler Engineering Co., Inc., 750 S. 13 St., Newark 3, N. J. (14)  
Electric Switch Corp., 1340 Eleventh St., Columbus, Ind. (1, 6, 14)  
Electronic Control Corp., 1573 E. Forest Ave., Detroit 7, Mich. (10, 11, 12)  
Electronics Corp. of America, 77 Broadway, Cambridge 42, Mass. (7, 8, 9, 11, 12, 14)  
Emmett Machine & Mfg., Inc., 445 E. Turkeyfoot Lake Rd., Akron 19, Ohio (12)  
Est Instrument Co., 96 S. Washington Ave., Bergenfield, N. J. (2, 9, 11)  
Federal Sign & Signal Corp., 8726 S. State St., Chicago 19, Ill. (1)  
Federal Telephone and Radio Co., 100 Kingsland Rd., Clifton, N. J. (10, 12)  
Fernal Inc., Pleasant St., Ashland, Mass. (7, 12)  
Ferraro, Inc., 8106 W. Nine Mile Rd., Oak Park 37, Mich. (7, 10)  
Fielden Instrument Div., Robertshaw-Fulton Controls Co., 2920 N. Fourth St., Phila. 33, Pa. (7, 12)  
Fischer & Porter Co., 335 Warminster Rd., Hatboro, Pa. (7, 8, 12)  
Fisher-Pierce Co., Inc., 170 Pearl St., South Braintree, Mass. (6)  
General Control Co., 1200 Soldiers Field Rd., Boston 34, Mass. (7, 11, 14)  
General Controls Co., 801 Allen Ave., Glendale, Calif. (4, 5, 6, 7, 8, 9, 12)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (2, 3, 7, 8, 9, 10)  
General Radio Co., 275 Massachusetts Ave., Cambridge 39, Mass. (6)  
Graham Co., Inc., Phillip E., 2606 W. Michigan St., Ubbuabaeus 22, Ind. (14)  
H-B Instrument Co., American & Bristol Sts., Philadelphia 40, Pa. (12)  
Haertel Co., Walter, 2840 4th Ave., So., Minneapolis, Minn. (5)  
Haley Electronics Co., 57 William St., N. Y. 5, N. Y. (7)  
Hays Corp., Michigan City, Ind. (7, 10, 12)  
Healy-Ruff Co., Water Level Controls Div., 2255 University Ave., St. Paul 14, Minn. (7)  
Hobart Bros., Hobart Square, Troy 1, Ohio (14)  
Hope Electrical Products Co., Inc., 338 Wilson Ave., Newark 5, N. J. (7)  
Illinois Testing Laboratories, Inc., 420 N. LaSalle St., Chicago 10, Ill. (12)  
International Business Machines Corp., 590 Madison Ave., N. Y. 22, N. Y. (3, 6, 7, 12)  
Iron Fireman Mfg. Co., 3170 W. 106 St., Cleveland 11, Ohio (8)  
Iron Fireman Mfg. Co., Electronics Div., 2838 S. E. 9th Ave., Portland 2, Ore. (8)  
Larson Instrument Co., 24 Orchard St., Tarrytown, N. Y. (12)  
Linde Air Products Co., 30 E. 42 St., N. Y. 17, N. Y. (14)  
Lyon Rural Electric Co., 2075 Moore St., San Diego 12, Calif. (5)  
Machinery Electrification, Inc., Northboro, Mass. (7, 10)  
Magnetic Amplifiers, Inc., 632 Tinton Ave., N. Y. 55, N. Y. (11, 13)  
Magnetrol, Inc., 2110 S. Marshall Blvd., Chicago 23, Ill. (7)  
Manning, Maxwell & Moore, Inc., 250 E. Main St., Stratford, Conn. (3, 7, 12)  
McDonnell & Miller Inc., 3500 N. Spaulding Ave., Chicago 18, Ill. (7)  
Merco Corp., 4201 W. Belmont Ave., Chicago 41, Ill. (7, 8, 9)  
Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave., S., Minneapolis 8, Minn. (4, 5, 7, 8, 9, 12)  
Minneapolis-Honeywell Regulator Co., Industrial Div., Wayne & Windrim Aves., Phila. 44, Pa. (5, 7, 12)

National Time & Signal Corp., 21800 Wyoming Ave., Detroit 37, Mich. (14)  
Partlow Corp., 2 Campion Rd., New Hartford, N. Y. (4)  
Partrick & Wilkins Co., 51 N. Seventh St., Phila. 6, Pa.  
Peer, Inc., 1220 Milton St., Benton Harbor, Mich. (14)  
Penn Controls, Inc., Goshen, Ind. (4, 5, 7, 8, 9)  
Penn Industrial Instrument Div., Burgess Manning Co., 4110 Haverford Ave., Phila. 4, Pa. (7)  
Pereny Equipment Co., 893 Chambers Rd. (Station A, Box 153), Columbus, Ohio (12)  
Peschel Electronics, Inc., 13 Garden St., New Rochelle, N. Y. (12, 14)  
Photobell Co., 43 Vesey St., New York 7, N. Y. (2, 5, 6, 7, 11, 12, 14)  
Plotting Processes Co., 109 Lyman St., Holyoke, Mass. (7, 12)  
Pyrosil, Inc., 1889 Front St., Cuyahoga Falls, Ohio (12)  
Revere Corp. of America, Wallingford, Conn. (7)  
Reynolds Electric Co., 3000 River Rd., River Grove, Ill. (1)  
Ripley Co., Inc., Factory St., Middletown, Conn. (2, 7, 11, 14)  
Rowan Controller Co., 2315 Homewood Ave., Baltimore 18, Md. (6)  
SAFA Alarm Div., Fyr-Fyter Co., 243 W. Market St., Orrville, Ohio (1)  
Schlasy Bros., Inc., 4916 W. 67th St., Chicago 38, Ill. (14)  
Shallcross Controls, Inc., 2217-21 N. 31 St., Milwaukee 8, Wis. (8)  
Square D Co., 6060 Rivard St., Detroit 11, Mich. (7, 14)  
Taylor-Winfield Corp., 1052 Mahoning Ave., Warren, Ohio (14)  
Techniflex Corp., 55 Jersey Ave., Port Jervis, N. Y. (7)  
Thermo Electric Mfg. Co., 465 Huff St., Dubuque, Iowa (12)  
Tork Clock Co., Inc., 1 Grove St., Mt. Vernon, N. Y. (8)  
Trico Fuse Mfg. Co., 2948 N. 5th St., Milwaukee 12, Wis. (7)  
Trimont Instrument Co., 3119 W. Lake St., Chicago 12, Ill. (7)  
Ulanet Co. George, 413-15 Market St., Newark 5, N. J. (12)  
United Electric Controls Co., 85 School St., Watertown 72, Mass. (5, 7, 12)  
U. S. Gauge Div., American Machine & Metals, Inc., Clymer Ave., Sellersville, Pa. (5)  
Viking Instruments, Inc., East Haddam, Conn. (7)  
Vermaline Products Co., P. O. Box 222, Hawthorne, N. J. (14)  
Varo Mfg. Co., Inc., 1801 Walnut St., Garland, Tex. (10)  
Walton Laboratories, Inc., 1186 Grove St., Irvington 11, N. J. (5)  
Warrick Co., Chas. F., 1964 W. Eleven Mile Rd., Berkeley, Mich. (7)  
Weltronic Co., 19500 W. Eight Mile Rd., Detroit 19, Mich. (14)  
West Electric Heater Co., 390 First St., San Francisco 5, Calif. (3)  
West Instrument Corp., 525 N. Noble St., Chicago 22, Ill. (12)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (2, 10, 11, 13, 14)  
Weston Electrical Instrument Corp., 614 Frellinghousen Ave., Newark 5, N. J. (6, 13)  
White-Rodgers Electric Co., 1209 Cass Ave., St. Louis 6, Mo. (4, 8, 12)  
Wilson & Co., G. C., 1950-8th Ave., Huntington, W. Va. (14)  
Workrite Mfg. Co., 2451 Broadway, Santa Monica, Calif. (7)  
Worner Electronic Devices, Rankin, Ill. (6, 7, 11)  
Zenith Electric Co., 155 W. Walton St., Chicago 10, Ill. (1)

#### CONTROLS, Misc.

Low Voltage Remote—see SYSTEMS, Light-  
Switching, Low Voltage, Remote Control  
Photo-Electric—see CELLS, Photo-Electric;  
RELAYS, Photo-Electric  
Pressure—see SWITCHES, Control, Auto-  
matic, Pressure-Operated  
Program—see CLOCKS, Program  
Pump—see CONTROLS, Liquid Level  
Refrigeration—see RELAYS, Temperature,  
Refrigerator  
Remote Indicating—see SERVOS, Motor and  
Generator  
Servo—see SERVOS, Motor and Generator  
Temperature—see THERMOSTATS;  
SWITCHES, Control, Automatic Thermo-  
stat-controlled  
Time Cycle—see TIMERS, Stop and Repeat  
Cycle

#### CONVERTERS

1. Frequency  
2. Phase  
3. Synchronous  
Air Associates, Inc., Industrial Ave., Teterboro, N. J. (1)  
Ajax Electrothermic Corp., Ajax Park, Trenton 5, N. J. (1)  
Allis Co., Louis, 427 E. Stewart St., Milwaukee 7, Wis. (1, 2, 3)  
Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (1, 2, 3)

American Electronics, Inc., 4811 Telegraph Rd., Los Angeles 22, Calif. (1, 2, 3)  
Bogus Electric Mfg. Co., 52 Iowa Ave., Paterson 3, N. J. (1)  
Bristol Co., Waterbury 20, Conn. (1, 3)  
Brush Above, Inc., 60-07 39th Ave., Woodside, Long Island, N. Y. (1, 3)  
Century Electric Co., 1806 Pine St., St. Louis 3, Mo. (1, 3)  
Communication Measurements Lab., Inc., 350 Leland Ave., Plainfield, N. J. (2)  
Electric Motors & Specialties, Inc., King & Hamsher Sts., Garrett, Ind. (1)  
Electric Specialty Co., 211 South St., Stamford, Conn. (1, 2, 3)  
Electro-Voice Inc., 404 Carroll St., Buchanan, Mich. (1)  
Electronic Measurements Co., Inc., Lewis St. & Maple Ave., Eatontown, N. J. (1)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 3)  
Generator Corp., Manassas, Va. (1)  
Hertner Electric Co., 12690 Elmwood Ave., Cleveland 11, Ohio (3)  
Jerrold Electronics Corp., 26th & Dickinson Sts., Phila. 46, Pa. (1)  
Kato Engineering Co., Mankato, Minn. (1)  
Katolight Corp., First Ave. at Chestnut (P. O. Box 891), Mankato, Minn. (3)  
Kurz & Roet Co., Inc., 232 E. North Island St., Appleton, Wis. (1)  
Marathon Electric Mfg. Corp., Wausau, Wis. (1, 3)  
Robbins & Myers, Inc., 1345 Lagonda Ave., Springfield, Ohio (1)  
Sangamo Electric Co., 11th & Converse, Springfield, Ill. (3)  
Sorensen & Co., Inc., 375 Fairfield Ave., Stamford, Conn. (1)  
Star-Kimble Motor Div., Miehe Printing Press & Mfg. Co., 200 Bloomfield Ave., Bloomfield, N. J. (1, 2, 3)  
System Analyzer Corp., 700 W. State St., Kokomo, Ind. (2)  
Varo Mfg. Co., Inc., 1801 Walnut St., Garland, Tex. (1, 3)  
Weltronic Co., 19500 W. Eight Mile Rd., Detroit 19, Mich. (1)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2, 3)

#### CONVERTERS, Vibrator—see RECTIFIERS, Vibration Power Supply

#### COOLERS, Air—see AIR CONDITIONERS; FANS; BLOWERS

#### COOLERS, Water

Acme Industries, Inc., 620 N. Mechanic St., Jackson, Mich.  
American Coils Co., 360 Thomas St., Newark 5, N. J.  
Cool-ette, Inc., 20080 James Couzens Highway, Detroit 35, Mich.  
Cordley & Hayes, 443 Fourth Ave., N. Y. 16, N. Y.  
Ebac Mfg. Co., 265 N. Hamilton Rd., Columbus 13, Ohio  
Frick Co., Waynesboro, Pa.  
General Electric Co., Air Conditioning Div., 5 Lawrence St., Bloomfield, N. J.  
Karen Corp., Maple Ave., Philmont, N. Y.  
Santa Fe Tank & Tower Co., 5401 S. Boyle Ave., Los Angeles 58, Calif.  
Sunroc Refrigeration Co., Glen Riddle, Pa.  
Westinghouse Electric Corp., Electric Appliance Div., 653 Page Blvd., Springfield 2, Mass.  
York Corp., Roosevelt & P.R.R., York, Pa.

#### COPPER

1. Busbar
2. Sheet and Rod

American Brass Co., 414 Meadow St., Waterbury 20, Conn. (1, 2)  
American Nickeloid Co., Peru, Ill. (2)  
Chase Brass & Copper Co., Inc., 236 Grand St., Waterbury 20, Conn. (1, 2)  
Copperweld Steel Co., Wire and Cable Div., Glassport, Pa. (2)  
Hussey & Co., C. G., 2850 Second Ave., Pittsburgh 19, Pa. (1, 2)  
Linde Air Products Co., 30 E. 42 St., N. Y. 17, N. Y. (2)  
Phelps Dodge Copper Products Corp., 40 Wall St., New York 5, N. Y. (1, 2)  
Revere Copper & Brass Inc., 230 Park Ave., N. Y. 17, N. Y. (1, 2)

#### COPPERS, Battery

Bryant Mfg. Co., 410 N. Paulina St., Chicago 22, Ill

#### COPPERS, Soldering see IRONS, Electric, Soldering

#### CORD (Classified as to Composition)

1. Armored
2. Asbestos Covered
3. Canvasite
4. Cotton-Covered
5. Heat- and Moisture-Resistant
6. Heavy Duty
7. Plastic
8. Reinforced
9. Rubber-Sheathed



10. Thermoplastic  
11. Tinsel  
12. Twisted or Parallel

Alpha Wire Corp., 430 Broadway, N. Y. 13, N. Y. (4, 6, 7, 9, 10, 12)  
American Insulated Wire Corp., 36 Freeman St., Pawtucket, R. I. (2, 4, 5, 6, 7, 8, 9, 10, 11, 12)

● AMERICAN STEEL & WIRE DIV., UNITED STATES STEEL CORP., Rockefeller Bldg., Cleveland 13, Ohio (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12)—ADV. PG. 93, 94, 95, 96

Berkshire Electric Cable Co., Leeds, Mass. (4, 7, 10, 12)  
Brand & Co., Inc., William North & Valley Sts., Willimantic, Conn. (5, 7, 10, 11, 12)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (2, 4, 6, 7, 9, 10, 12)  
Carol Cable Co., 190 Middle St., Pawtucket, R. I. (16)

Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (2, 4, 5, 7, 9, 10, 11, 12)  
Clifton Conduit Co., Inc., 75 Montgomery St., Jersey City 2, N. J. (9, 10)  
Collyer Insulated Wire Co., 249 Roosevelt Ave., Pawtucket, R. I. (2, 5, 6, 8, 9)  
Columbia Wire & Supply Co., 2850 Irving Park Rd., Chicago 18, Ill. (4, 5, 6, 7, 8, 9, 10, 11, 12)

Coranish Wire Co., Inc., 50 Church St., N. Y. 7, N. Y. (2, 4, 5, 6, 7, 9, 10, 11, 12)  
Diamond Wire & Cable Co., 445 Park Ave., Sycamore, Ill. (1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12)  
Empire Wire and Cable Co., Penn Yan, N. Y. (6, 7, 12)

● GENERAL CABLE CORP., 420 Lexington Ave., N. Y. 17, N. Y. (1, 2, 4, 5, 6, 7, 8, 9, 10, 12)—ADV. PG. 58

General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn. (2, 4, 6, 9, 10, 12)  
General Insulated Wire Works, Inc., 69 Gordon Ave., Providence 5, R. I. (2, 5, 6, 7, 8, 9, 10, 11, 12)

Graybar Electric Co., Inc., 480 Lexington Ave., N. Y. 17, N. Y. (12)  
Hathfield Wire and Cable Div., Continental Copper & Steel Indus., Inc., 487 Hillside Ave., Hillside 5, N. J. (2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12)

Kolled Kords, Inc., Box K, Hamden, Conn. (6, 9, 11)  
Lowell Insulated Wire Div., Overlakes Corp., 171 Lincoln St., Lowell, Mass. (6, 7, 9, 10, 12)  
Miller Electric Co., 120 Main St., Pawtucket, R. I. (2, 4, 5, 6, 7, 10, 11, 12)

Modelistic Products Co., 1500 Bangs Ave., Asbury Park, N. J. (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12)  
National Electric Products Corp., Gateway Center, 140 Stanwix St., Pittsburgh 22, Pa. (2, 5, 6, 9, 12)

New England Electrical Works, Inc., 365 Main St., Lisbon, N. H. (4, 12)  
● OKONITE CO., Passaic, N. J. (4, 5, 6, 7, 8, 9, 10, 11, 12)—ADV. PG. 137

Packard Electric Div., General Motors Corp., Warren, Ohio (6, 9, 12)  
Phalo Plastics Corp., 25 Foster St., Worcester 8, Mass. (10)

● PHELPS DODGE COPPER PRODUCTS CORP., 40 Wall St., New York 5, N. Y. (4, 5, 6, 8, 9, 12)—ADV. PG. 98-99

Plastic Wire & Cable Corp., E. Main St., Jewett City, Conn. (4, 5, 6, 7, 10, 11, 12)  
Revere Corp. of America, Wallingford, Conn. (7, 10)  
Rhode Island Insulated Wire Co., Inc., 50 Burnham Ave., Cranston, R. I. (1, 2, 5, 7, 10, 12)

Rockbestos Products Corp., Nicolli and Canner Sts., New Haven 4, Conn. (2, 4, 5, 12)  
● ROME CABLE CORP., Ridge St., Rome, N. Y. (5, 6, 9, 10)—ADV. PG. 122-123

Royal Electric Co., Inc., 95 Grand Ave., Pawtucket, R. I. (2, 4, 5, 6, 7, 8, 9, 10, 11, 12)  
Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)

● SIMPLEX WIRE & CABLE CO., 79 Sidney St., Cambridge 39, Mass. (5, 6, 9)—ADV. PG. 142

Triple-A Specialty Co., 2101 Walnut St., Chicago 12, Ill. (4, 7)

● UNITED STATES RUBBER CO., ELECTRICAL WIRE AND CABLE DEPT., 1230 Avenue of the Americas, New York 20, N. Y. (4, 5, 6, 7, 8, 9, 10, 12)—ADV. PG. 144

United States Rubber Co., Mechanical Goods Div., 1230 Avenue of the Americas, New York 20, N. Y. (9)  
Whitney Blake Co., 1565 Dixwell Ave., Hamden, Conn. (4, 5, 6, 7, 9, 10, 11, 12)

CORD (Classified as to Usage)

1. Arc Lamp
2. Battery Charging
3. Bell
4. Brewery
5. Heater
6. Lamp, Flexible
7. Locomotive Cab
8. Packing House
9. Pendant
10. Pull Switch
11. Range
12. Socket

Alpha Wire Corp., 430 Broadway, N. Y. 13, N. Y. (6)  
American Insulated Wire Corp., 36 Freeman St., Pawtucket, R. I. (3, 4, 5, 6, 11, 12)

● AMERICAN STEEL & WIRE DIV., UNITED STATES STEEL CORP., Rockefeller Bldg., Cleveland 13, Ohio (1, 2, 3, 7, 8, 9, 10, 11)—ADV. PG. 93, 94, 95, 96

Beckley Electric Co., Inc., 468-470 Grand Ave., Brooklyn 38, N. Y. (2, 3, 4, 5, 6, 9, 10, 12)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (3, 5, 6, 11, 12)  
Champion Cable Co., 1805 E. 40 St., Cleveland 3, Ohio (2)  
Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (5, 10, 11, 12)

Collyer Insulated Wire Co., 249 Roosevelt Ave., Pawtucket, R. I. (1, 7)  
Columbia Wire & Supply Co., 2850 Irving Park Rd., Chicago 18, Ill. (2, 4, 6, 11)  
Cornish Wire Co., Inc., 50 Church St., N. Y. 7, N. Y. (2, 3, 5, 11)  
Dependable-Electric Mfg. Co., Inc., 18 Johnson Ave., Brooklyn 6, N. Y. (5, 6, 12)  
Diamond Wire & Cable Co., 445 Park Ave., Sycamore, Ill. (1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12)  
Electric-Cord Mfg. Co., Inc., 2554-2568 E. 18 St., Brooklyn 35, N. Y. (5, 6, 12)

● GENERAL CABLE CORP., 420 Lexington Ave., N. Y. 17, N. Y. (2, 3, 5, 7, 11)—ADV. PG. 58

General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn. (5, 6, 7, 11)  
General Insulated Wire Works, Inc., 69 Gordon Ave., Providence 5, R. I. (5, 6)

Hathfield Wire and Cable Div., Continental Copper & Steel Indus., Inc., 487 Hillside Ave., Hillside 5, N. J. (2, 3, 4, 5, 6, 7, 9, 11, 12)  
Kolled Kords, Inc., Box K, Hamden, Conn. (5, 6)  
Electric-Cord Mfg. Co., Inc., 2554-2568 E. 18 St., Brooklyn 35, N. Y. (10, 11, 12)

Lowell Insulated Wire Div., Overlakes Corp., 171 Lincoln St., Lowell, Mass. (5, 6, 12)  
Miller Electric Co., 120 Main St., Pawtucket, R. I. (3, 5, 6, 9, 11, 12)

Modelistic Products Co., 1500 Bangs Ave., Asbury Park, N. J. (2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12)  
National Electric Products Corp., Gateway Center, 140 Stanwix St., Pittsburgh 22, Pa. (4, 6, 7, 11)  
New England Electrical Works, Inc., 365 Main St., Lisbon, N. H. (3)

● OKONITE CO., Passaic, N. J. (1, 2, 3, 4, 5, 6, 7, 8, 9, 11)—ADV. PG. 137

Packard Electric Div., General Motors Corp., Warren, Ohio (6, 9, 12)  
Phalo Plastics Corp., 25 Foster St., Worcester 8, Mass. (6)

● PHELPS DODGE COPPER PRODUCTS CORP., 40 Wall St., New York 5, N. Y. (6, 9, 11)—ADV. PG. 98-99

Plastic Wire & Cable Corp., E. Main St., Jewett City, Conn. (3, 6, 10, 11, 12)  
Rhode Island Insulated Wire Co., Inc., 50 Burnham Ave., Cranston, R. I. (3, 5, 6, 11)  
Rockbestos Products Corp., Nicolli and Canner Sts., New Haven 4, Conn. (7)

● RODALE MFG. CO., INC., 6th & Minor Sts., Emmaus, Pa. (10, 11)—ADV. PG. 143

● ROME CABLE CORP., Ridge St., Rome, N. Y. (7)—ADV. PG. 122-123

Royal Electric Co., Inc., 95 Grand Ave., Pawtucket, R. I. (3, 4, 5, 6, 9, 11)  
Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)

● UNITED STATES RUBBER CO., ELECTRICAL WIRE AND CABLE DEPT., 1230 Avenue of the Americas, New York 20, N. Y. (2, 6, 7)—ADV. PG. 144

United States Rubber Co., Mechanical Goods Div., 1230 Avenue of the Americas, New York 20, N. Y. (5)

U. S. Wire & Cable Corp., Progress & Monroe Sts., Union, N. J. (3, 6)  
Whitney Blake Co., 1565 Dixwell Ave., Hamden, Conn. (5, 6)

CORD, Misc.

Armature Binding—see TWINE, Armature  
Winding and Lacing  
Concentric—see CABLE (Classified as to Composition), Concentric  
Deck—see CORD, Heat- and Moisture-Resistant  
Portable—see CORD (Classified as to Composition), Twisted or Parallel  
Sets—see CORDS  
Welding—see CABLE (Classified as to Usage), Welding

CORDS

1. Extension
2. Extension, with Built-in Transformer
3. Extension Socket
4. Molded Integral
5. Range
6. Self-Coiling

Alpha Wire Corp., 430 Broadway, N. Y. 13, N. Y. (1)  
American Electrical Heater Co., 6110 Cass Ave., Detroit 2, Mich. (4)

American Insulated Wire Corp., 36 Freeman St., Pawtucket, R. I. (3, 5)

● AMERICAN STEEL & WIRE DIV., UNITED STATES STEEL CORP., Rockefeller Bldg., Cleveland 13, Ohio (1, 5)—ADV. PG. 93, 94, 95, 96

Beckley Electric Co., Inc., 468-470 Grand Ave., Brooklyn 38, N. Y. (1, 3, 4)

Bell Electric Co., 1844-50 W. 21 St., Chicago 8, Ill. (1)  
Black Mfg. Co., M., 300-08 N. Third St., Phila. 6, Pa. (1)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (1, 2, 3, 4, 5)

Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (1, 3, 4, 5)  
Columbia Wire & Supply Co., 2850 Irving Park Rd., Chicago 18, Ill. (1, 4)

Cordomatic Div., Vacuum Cleaner Corp. of America, 1724 W. Indiana Ave., Phila. 32, Pa. (1)  
Cornish Wire Co., Inc., 50 Church St., N. Y. 7, N. Y. (1)

Dependable-Electric Mfg. Co., Inc., 18 Johnson Ave., Brooklyn 6, N. Y. (1)  
Diamond Wire & Cable Co., 445 Park Ave., Sycamore, Ill. (1, 4, 5, 6)

Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (1, 3, 5)  
Electric-Cord Mfg. Co., Inc., 2554-2568 E. 18 St., Brooklyn 35, N. Y. (1)

Ericson Mfg. Co., 5209 Euclid Ave., P. O. Box 1401, Cleveland 3, Ohio (1, 2, 3)  
Gem Electric Mfg. Co., Inc., 237 37th St., Brooklyn, N. Y. (1, 3, 5)

General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn. (1, 5)  
General Insulated Wire Works, Inc., 69 Gordon Ave., Providence 5, R. I. (1, 4)

Kas-Kel Electric Co., Inc., 5 Union Sq., N. Y. 3, N. Y. (1, 3)  
Kolled Kords, Inc., Box K, Hamden, Conn. (1, 4, 6)

Kulka Electric Mfg. Co., Inc., 633 S. Fulton Ave., Mount Vernon, N. Y. (2)  
Lexington Mfg. Co., Inc., 236 Greenpoint Ave., Brooklyn 22, N. Y. (5)

Lowell Insulated Wire Div., Overlakes Corp., 171 Lincoln St., Lowell, Mass. (1, 4)  
Massey, Inc., A. H., 111 3rd St. (P. O. Box 206), Derby, Conn. (1)

Miller Electric Co., 120 Main St., Pawtucket, R. I. (3, 4)  
Modelistic Products Co., 1500 Bangs Ave., Asbury Park, N. J. (1, 2, 3, 4, 5, 6)

Natale Machine & Tool Co., 339 Highway #17, Carlstadt, N. J. (1)  
Packard Electric Div., General Motors Corp., Warren, Ohio (1)

Paranite Wire & Cable Div., 1601 Wall St., Fort Wayne 6, Ind. (1, 4, 5)  
Pass & Seymour, Inc., Syracuse 9, N. Y. (5)

Phalo Plastics Corp., 25 Foster St., Worcester 8, Mass. (1)  
● PHELPS DODGE COPPER PRODUCTS CORP., 40 Wall St., New York 5, N. Y. (1, 5)—ADV. PG. 98-99

Plastic Wire & Cable Corp., E. Main St., Jewett City, Conn. (1, 3, 4, 5)  
R-B-M Div., Essex Wire Corp., 131 Godfrey St., Logansport, Ind. (1, 5)

Rhode Island Insulated Wire Co., Inc., 50 Burnham Ave., Cranston, R. I. (1, 3)  
Riverside Mfg. & Electrical Supply Co., 10228 Richfield Ave., Dearborn, Mich. (1)

● RODALE MFG. CO., INC., 6th & Minor Sts., Emmaus, Pa. (1, 3, 5)—ADV. PG. 143

Royal Electric Co., Inc., 95 Grand Ave., Pawtucket, R. I. (1, 3, 5)  
● SIMPLEX WIRE & CABLE CO., 79 Sidney St., Cambridge 39, Mass. (1)—ADV. PG. 142

Sittler Corp., 18 N. Ada St., Chicago 7, Ill. (2)  
Stanton Corp., 5033 E. 18th Ave., Chicago 30, Ill. (1)

Triple-A Specialty Co., 2101 Walnut St., Chicago 12, Ill. (1, 3, 4)  
United States Rubber Co., Electrical Wire and Cable Dept., 1230 Avenue of the Americas, New York 20, N. Y. (1, 5)

U. S. Wire & Cable Corp., Progress & Monroe Sts., Union, N. J. (1, 4)  
Waco Mfg. Co., 632 North Albany Ave., Chicago 12, Ill. (1)

Whitney Blake Co., 1565 Dixwell Ave., Hamden, Conn. (1, 4, 5, 6)  
Woodhead Co., Daniel, 15 N. Jefferson St., Chicago 6, Ill. (1, 2)

CORES

1. Powdered Iron
2. Refractory
3. Tape Wound
4. Transformer

Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee 4, Wis. (2)  
Arnold Engineering Co., P. O. Box 6, Marango, Ill. (3, 4)

Du-Co Ceramics Co., Main St. Extension (Box 144), Saxenburg, Pa. (2)  
Electrical Refractories Co., 1900 E. Clark St., East Palestine, Ohio (2)

Federal Telephone and Radio Co., 100 Kingsland Rd., Clifton, N. J. (4)  
General Cable Corp., 420 Lexington Ave., N. Y. 17, N. Y. (1, 2, 3, 4)

American Flexible Coupling Co., 1850 Pittsburgh (3, 4)  
Ave., Erie, Pa. (3, 4)

Kirchberger & Co., Inc., M., 83-91 W. Forest Ave., Englewood, N. I. (2)  
Langwin Mfg. Corp., 37 W. 65 St., N. Y. 23, N. Y. (4)

Magnetics, Inc., Box EPG, Butler, Pa. (3, 4)  
Norton Co., 1 New Bond St., Worcester 6, Mass. (2)

Pyroferic Co., Inc., 216 St. & Brom Blvd., N. Y. 67, N. Y. (1, 4)  
Quik-Cor, Inc., 1750 N. E. 10th St., Oklahoma City 4, Okla. (4)

Radio Cords, Inc., 9540-50 Tulley Ave., Oak Lawn, Ill. (1)

## PRODUCT DIRECTORY

Stackpole Carbon Co., Tannery St., St. Mary's, Pa. (1)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (3, 4)

### COUNTERS

Aero Instrument Co., 11423 Vanowen St., North Hollywood, Calif.  
Cramer Co., Inc., R. W., Main St., Centerbrook, Conn.  
Durant Mfg. Co., 1981 No. Buffum St., Milwaukee 1, Wis.  
Electronic Control Corp., 1573 E. Forest Ave., Detroit 7, Mich.  
Electronics Corp. of America, 77 Broadway, Cambridge 42, Mass.  
Emmett Machine & Mfg. Co., Inc., 445 E. Turkeyfoot Lake Rd., Akron 19, Ohio  
Fischer & Porter Co., 335 Warminster Rd., Hatboro, Pa.  
General Control Co., 1200 Soldiers Field Rd., Boston 34, Mass.  
Haydon Co., A. W., 232 N. Elm St., Waterbury, Conn.  
Photobell Co., 43 Vesey St., New York 7, N. Y.  
Post Machinery Co., Electronics Products Div., 140 Elliott St., Beverly, Mass.  
Potter Instrument Co., Inc., 115 Cutter Mill Rd., Great Neck, L. I., N. Y.  
Royal Electric Mfg. Co., 1122 E. 87 St., Chicago 19, Ill.  
Streeter-Amet Co., 4105 Ravenswood Ave., Chicago, Ill.  
Veeder-Root, Inc., 70 Sargeant St., Hartford 2, Conn.

COUNTERS, Geiger—see DETECTORS, Radiation

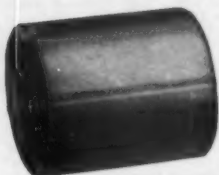
### COUPLINGS

1. Conduit
2. Conduit, Flexible, Explosion-Proof
3. Flexible Shaft
4. Motor Shaft

Appleton Electric Co., 1701-59 Wellington Ave., Ajax Flexible Coupling Co., Inc., Westfield, N. Y. Chicago 13, Ill. (1, 2)  
Browning Mfg. Co., Maysville, Ky. (3, 4)  
Clifton Conduit Co., Inc., 75 Montgomery St., Jersey City 2, N. J. (1)  
Co-operative Industries, Inc., 100 Oakdale Rd., Chester, N. J. (1)  
Conduit Pipe Products Co., 157 W. Fulton St., Columbus 16, Ohio (1)

conduit of columbus

# Couplings



for right—tight connections

Accurate tapping, careful chamfering and rigid inspection combine to give users completely satisfactory installations. Conduit Couplings are hot-dipped galvanized or black enameled . . . are available in all sizes from 1/2" to 6". Sizes 1/2" to 2" are conveniently packaged at no extra cost. Shipped promptly from factory or from one of ten strategically located warehouses.

CONDUIT PIPE PRODUCTS CO.,

*Conduit* COLUMBUS, OHIO  
COLUMBUS

SOLD ONLY THROUGH WHOLESALERS



## GEDNEY 3-PIECE CONDUIT COUPLINGS

Gedney brings you a choice of twelve sizes ranging from 1/2" to 6". They're malleable iron to eliminate breakage . . . cadmium plated for longest life . . . accurately machined and threaded . . . individually inspected to ensure top quality and slash installation time and costs to rock bottom.

Gedney Fittings FIT

## GEDNEY ELECTRIC COMPANY



RKO BLDG. • RADIO CITY • NEW YORK 20  
Foundry, Factory and Shipping Point,  
Terryville, Conn.

Congress Drives Div., Tann Corp., 3750 E. Outer Dr., Detroit 34, Mich. (4)  
Crocker-Wheeler Div., Elliott Co., Ampere, N. J. (4)  
● CROUSE-HINDS CO., Syracuse 1, N. Y. (2)—ADV. PG. 116-117  
Diamond Chain Co., Inc., 402 Kentucky Ave., Indianapolis, Ind. (3)  
Dodge Mfg. Corp., 1944 S. William St., Mishawaka, Ind. (3)  
Electrical Fittings Corp., 37-50 57th St., Woodside 77, N. Y. (1)  
Elliott Co., Jeannette, Pa. (3)  
Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (1)  
General Steel Fittings Co., 1321 21st St., Racine, Wis. (1)  
Gerbing Mfg. Corp., 11800 Milwaukee Ave., Northbrook, Ill. (4)  
Kilbark Electric Mfg. Co., 3940 Easton Ave., St. Louis 13, Mo. (1, 2)  
Knuth Engineering Co., 2617 N. St. Louis Ave., Chicago 47, Ill. (1)  
Kondur Corp., 1040 W. 12 St., Erie, Pa. (1)  
Koppers Co., Inc., Koppers Bldg., Pittsburgh 19, Pa. (3, 4)  
Koppers Co., Inc., Metal Products Div., 200 Scott St., Baltimore 3, Md. (3)  
Link-Belt Co., 307 N. Michigan Ave., Chicago 1, Ill. (3, 4)  
Lord Mfg. Co., 1635 W. 12 St., Erie, Pa. (3)  
Lovejoy Flexible Coupling Co., 4963 W. Lake St., Chicago 44, Ill. (3, 4)  
Mark & Co., Clayton, 1900 Dempster St., Evanston, Ill. (1)  
Metalectrics, Inc., 677 Broadway, N. Y. 12, N. Y. (1)  
Meter Devices Co., 1001 Prospect Ave. S. W., Canton 6, Ohio (1)  
● MIDWEST ELECTRIC MFG. CO., 1639 Walnut St., Chicago 12, Ill. (1)—ADV. PG. 104-105  
Morse Chain Co., Borg Warner Corp., Ithaca, N. Y. (4)  
● O. Z. ELECTRICAL MFG. CO., INC., 262 Bond St., Brooklyn 17, N. Y. (1)—ADV. PG. 136  
Philadelphia Gear Works Inc., Erie Ave. & G St., Phila. 34, Pa. (4)  
Pipe Coupling Mfrs., Inc., P. O. Box 488, Martins Ferry, Ohio (1)  
Pittsburgh Standard Conduit Co., 61 Bridge St., Pittsburgh 23, Pa. (1)  
Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (1, 2)  
Rettan Mfg. Co., 10 Wall St. (P. O. Box 1745), New Haven 7, Conn. (1)  
Richards Co., J. R., P. O. Box 482, Carnegie, Pa. (1)  
Roller, Inc., Wm. G., 159 Liberty Ave., Mineola, N. Y. (1)

Smith & Serrell, Inc., 192 Washington St., Newark 2, N. J. (3, 4)  
Spang-Chalfant Div., National Supply Co., Two Gateway Center (P. O. Box 416), Pittsburgh 30, Pa. (1)  
Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa. (1)  
Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (1)  
Steeldust Co., Republic Bldg., Youngstown, Ohio (1)  
Thepitt Mfg. Co., Gregg & Hammond Sts., Carnegie, Pa. (1)  
Thomas & Betts Co., Inc., 36 Butler St., Elizabeth, N. J. (1)  
Walker Brothers, End St., Conshohocken, Pa. (1)  
Whitney Chain Co., 237 Hamilton St., Hartford 2, Conn. (4)  
Williams Products Co., H. E., 106 S. Main St., Carthage, Mo. (1)  
Yorkville Metal Products Co., 677 Broadway, N. Y. 12, N. Y. (1)  
Youngstown Sheet and Tube Co., Stambaugh Bldg., Youngstown 1, Ohio (1)

### COVERS, Appliance, Padded

Astrup Co., 2937 W. 25 St., Cleveland 13, Ohio  
Elkay Products Co., 323-27 W. 16 St., N. Y. 11, N. Y.  
Yeats Appliance Dolly Sales Co., 2124 N. 12th St., Milwaukee 5, Wis.

### COVERS Monhole

Alhambra Foundry Co., Ltd., 1147 Meridian Ave., Alhambra, Calif.  
Donley Brothers Co., 13938 Miles Ave., Cleveland 5, Ohio  
Sweet Iron Works, A. L., 166 Glenwood Ave., Medina, N. Y.

### COVERS, Wiring Device

1. Circuit Breaker
2. Conduit Body
3. Meter
4. Pull Box
5. Receptacle

Alhambra Foundry Co., Ltd., 1147 Meridian Ave., Alhambra, Calif. (3, 4)  
● ALL-STEEL EQUIPMENT INC., Aurora, Ill. (5)—ADV. PG. 114  
Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. (1, 2, 4)  
Arrolet Corp., Foot of Bower St., Montgomery, Pa. (2, 5)  
Arrow Conduit & Fittings Corp., 129 30th St., Brooklyn 32, N. Y. (5)  
Associated Lighting Service, 876 Kayne St., Redwood City, Calif. (1, 4, 5)  
Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (5)  
Burns Co., James F., 705-715 Cherry St., Phila. 6, Pa. (4)  
Circle F Mfg. Co., 720 Menmouth St., Trenton 4, N. J. (5)  
● CROUSE-HINDS CO., Syracuse 1, N. Y. (2, 5)—ADV. PG. 116-117  
Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (2)  
General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn. (5)  
Keystone Mfg. Co., 23328 Sherwood Rd., Centerline, Detroit, Mich. (4, 5)  
Knight Electrical Products Corp., 168 Van Brunt St., Brooklyn 31, N. Y. (4, 5)  
Kondur Corp., 1040 W. 12 St., Erie, Pa. (2, 5)  
Massey, Inc., A. H., 111 3rd St., (P. O. Box 206), Derby, Conn. (5)  
Meco Metal Box & Panel Mfg. Co., Inc., 2522 W. Huntingdon St., Phila. 32, Pa. (4)  
Perfect-Line Mfg. Corp., Old Country Rd. & Railroad Ave., P. O. Box 65, Hicksville, L. I., N. Y. (1)  
Porcelain Products, Inc., P. O. Box 300, Findlay, Ohio (5)  
Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (1, 2, 5)  
Richards Co., J. R., P. O. Box 482, Carnegie, Pa. (5)  
● RODALE MFG. CO., INC., 6th & Minor Sts., Emmaus, Pa. (5)—ADV. PG. 143  
Simplex Electric Co., 5136 Park Ave., Sycamore, Ill. (2)  
Square D Co., 6060 Rivard St., Detroit 11, Mich. (1)  
Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa. (5)

**CRANES**  
Cleveland Crane & Engineering Co., Wickliffe, Ohio  
Conco Engineering Works, Mendota, Ill.  
Craneveyor Corp., 1240 S. Boyle Ave., Los Angeles 23, Calif.  
Detroit Hoist & Machine Co., 8292 Morrow St., Detroit 11, Mich.  
Manning, Maxwell & Moore, Inc., Shaw-Box Crane & Hoist Div., Muskegon, Mich.  
Reading Crane & Hoist Corp., 2100 Adams St., Reading, Pa.  
Robbins & Myers, Inc., 1345 Lagonda Ave., Springfield, Ohio  
Round & Son, Inc., David, Box 883, Cleveland 22, Ohio  
Shepard Niles Crane & Hoist Corp., Schuyler Ave., Montour Falls, N. Y.  
Sherman & Reilly, Inc., 1 Broad St., Chattanooga 2, Tenn.  
Silent Hoist & Crane Co., 841-63rd St., Brooklyn 20, N. Y.

Speld Elevator Corp., 245 W. Buttonwood St., Reading, Pa.

**CREASERS, Slot Insulation—see FORMERS, Slot Insulation**

**CROSSARMS**

1. Angle
2. Channel
3. Metal
4. Wood
5. Wood, Treated

Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa. (1, 2, 3)  
American Crossarm Co., 1305 Dublin St., (Box 4008), New Orleans 18, La. (5)  
American Crossarm & Conduit Co., 7726 Sheridan Rd., Chicago 26, Ill. (4, 5)  
Brewer-Titchener Corp., 111 Port Watson St., Cortland, N. Y. (1, 2)  
Brooks Lumber Co., P. O. Box 153, Bellingham, Wash. (4, 5)  
Brown Wood Preserving Co., Inc., 404 Martin Brown Bldg., Louisville 2, Ky. (4, 5)  
Gulfport Creosoting Co., P. O. Box 995, Gulfport, Miss. (5)  
Haley & Co., Inc., R. G., 767 Spitzer Bldg., Toledo 4, Ohio (4, 5)  
Hatheway & Patterson Co., Inc., 15 County St., Mansfield, Mass. (4, 5)  
Hughes Bros., Inc., Seward, Neb. (1, 2, 3, 4, 5)  
International Crossarm Co., Inc., Foot of Cornwall Ave. (P. O. Box 1075), Bellingham, Wash. (4, 5)  
Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (4, 5)  
Koppers Co., Inc., Wood Preserving Div., Koppers Bldg., Pittsburgh 19, Pa. (5)  
Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif. (1, 2, 3)  
Line Material Co., 700 West Michigan St., Milwaukee, Wis. (4)  
Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (1, 2, 3)  
Pacific Car and Foundry Co., 4th & Factory, Renton, Wash. (1, 2)  
Poles, Inc., E. 706 Sprague Ave., Spokane 3, Wash. (4, 5)  
Sante Fe Tank & Tower Co., 5401 S. Boyle Ave., Los Angeles 58, Calif. (4, 5)  
Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa. (1, 3)  
Utilities Service Co., 1 Pine St., Allentown, Pa. (1, 2, 3, 4, 5)

**CROWFEET—see STUDS, Fixture**

**CUBICLES—see ENCLOSURES, Sheet Metal**

**CUSHIONS, Vibration—see BASES, Vibration Insulating**

**CUTOUTS**

1. Lighting, Series Street
2. Thermal
3. Transformer

Arrow-Hart & Hegeman Electric Co., 103 Hawthorn St., Hartford 6, Conn. (2)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (2, 3)  
Chance Co., A. B., 210 N. Allen St., Centralia, Mo. (2, 3)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 3)  
Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa. (1, 3)  
Illinois Testing Laboratories, Inc., 420 N. LaSalle St., Chicago 10, Ill. (2)  
Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (1, 3)  
Kearney Corp., James R., 4236 Clayton Ave., St. Louis 10, Mo. (1, 3)  
Meter Devices Co., 1001 Prospect Ave., S. W., Canton 6, Ohio (4)  
Philadelphia Electrical & Mfg. Co., 1200-36 N. 31 St., Phila. 23, Pa. (1)  
R T & E Co., 1900 E. North St., Waukesha, Wis. (3)  
Rusgreen Mfg. Co., 14262 Birwood Ave., Detroit 38, Mich. (1)

**CUTOUTS, Film—see CUTOUTS, Lighting, Series Street**

**CUTOUTS, Fuse**

1. Cartridge
2. Oil
3. Plug

Adam Electric Co., Frank, P. O. Box 357, St. Louis, Mo. (1, 3)  
Arrow-Hart & Hegeman Electric Co., 103 Hawthorn St., Hartford 6, Conn. (1, 3)  
Barber Electric Mfg. Co., Inc., 30 Chestnut St., N. Attleboro, Mass. (1, 3)  
Bryant Electric Co., Box D Barnum Station, Bridgeport 2, Conn. (1, 3)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (1, 3)  
Chase-Shawmut Co., 374 Merrimac St., Newburyport, Mass. (1)  
Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (1, 3)  
G & W Electric Specialty Co., 7780 Dante Ave., Chicago 19, Ill. (2)

General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2)  
General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn. (1, 3)  
General Electric Co., Wiring Device Dept., 95 Hathaway St., Providence 7, R. I. (1, 3)  
General Switch Corp., 45 Roebling St., Brooklyn 11, N. Y. (3)  
Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa. (1)  
Kearney Corp., James R., 4236 Clayton Ave., St. Louis 10, Mo. (1)  
Knox Porcelain Corp., 2706 Mynders Ave. (P. O. Box 2031), Knoxville 1, Tenn. (1, 3)  
Kolton Electric Mfg. Co., 123 New Jersey Railroad Ave., Newark 5, N. J. (1, 3)  
Leviton Mfg. Co., Inc., 236 Greenpoint Ave., Brooklyn 22, N. Y. (1, 3)  
Line Material Co., 700 W. Michigan St., Milwaukee, Wis. (1)  
Multi Electric Mfg. Inc., 4223 W. Lake St., Chicago 24, Ill. (1)  
Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (1)  
Specialties, Inc., 2936 Sacramento St., Pittsburgh 4, Pa. (1)  
Superior Fuse & Mfg. Co., Inc., 221 Hudson St., Hoboken, N. J. (1)

**CUTTERS**

1. Bolt
2. Cable, Armored
3. Card, Mat and Board
4. Conduit
5. E.M.T.
6. Knockout
7. Wire

American Pipe Tool Co., 4856 W. Kinzie St., Chicago 44, Ill. (4)  
Artos Engineering Co., 2757 S. 28 St., Milwaukee, Wis. (7)  
Beaver Pipe Tools, Inc., 310 Dana Ave., N. E., Warren, Ohio (4)  
Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y. (1, 7)  
Blackhawk Mfg. Co., 5325 W. Rogers, Milwaukee 46, Wis. (1, 7)  
Buck Electrical Mfg. Co., 139 Highland Parkway, Roselle, N. J. (7)  
Burbank Electrical Products, 215 W. Palm Ave., P. O. Box 7, Burbank, Calif. (7)  
Champion DeArment Tool Co., South Main St., Meadville, Pa. (7)  
Chance Co., A. B., 210 N. Allen St., Centralia, Mo. (7)  
Claus Cutlery Co., Fremont, Ohio (3, 7)  
Crescent Tool Co., 200 Harrison St., Jamestown, N. Y. (7)  
Crown Controls Co., Inc., 40-44 S. Washington St., New Bremen, Ohio (2)  
Erie Tool Works, 12th & Liberty Sts., Erie, Pa. (4)  
● GREENLEE TOOL CO., 2136 Twelfth St., Rockford, Ill. (6)—ADV. PG. 102-103  
Hobbs Mfg. Co., 26 Salisbury St., Worcester, Mass. (3)  
Hollands Mfg. Co., 342-352 E. 18 St., Erie, Pa. (4)  
Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill. (2)  
International Register Co., 2620 W. Washington Blvd., Chicago 12, Ill. (3)  
Interstate Drop Forge Co., Special Products Div., 4051 N. 27 St., Milwaukee 16, Wis. (1, 7)  
Leathwaite Machine Co., Inc., T. H., 323 E. 47 St., New York 17, N. Y. (2, 7)  
Lint, Clyde W., 2323 W. 18 St., Chicago 8, Ill. (6)  
Manco Mfg. Co., Bradley, Ill. (2)  
Montgomery Tool Co., 7 Tichenor Lane, Newark 5, N. J. (7)  
Nye Tool Co., 4120-30 Fullerton Ave., Chicago 32, Ill. (6)  
Oxwell Tool Co., Ltd., 928 Broadway, New York 10, N. Y. (1, 7)  
Quijada Tool Div., Gaines-Collins Co., 5474 Alhambra Ave., Los Angeles 32, Calif. (4)  
Reed Mfg. Co., 1456 W. 8th St., Erie, Pa. (4, 5)  
Safety Live Line Tool Co., 973 86th Ave., Oakland 21, Calif. (1, 2, 7)  
Snap-On Tools Corp., 8028-28th Ave., Kenosha, Wis. (1, 4, 7)  
Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J. (2, 7)  
Thread-Fry Mfg. Co., Corunna, Mich.  
Toledo Pipe Threading Machine Co., 1445 Summit St., Toledo 4, Ohio (4)  
Utica Drop Forge & Tool Corp., Utica 4, N. Y. (1, 2, 7)  
Wiss & Sons Co., J., 11-45 Littleton Ave., Newark 7, N. J. (2, 7)

**CUTTERS, Misc.**

**Circular, Panel and Box—see SAWS, Hole Commutator Milling—see SAWS, Commutator Slotting**

**D**

**DAMPENERS, Motor Vibration—see BASES, Vibration Insulating**

**DAMPENERS, Transmission Line Vibration**

Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa.  
Carey Mfg. Co., Philip, Cincinnati 15, Ohio

Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa.  
Lord Mfg. Co., 1635 W. 12 St., Erie, Pa.  
Sausse & Co., M. W., 636 N. Robertson Blvd., Los Angeles 46, Calif.  
United States Rubber Co., Mechanical Goods Div., 1230 Avenue of the Americas, New York 20, N. Y.

**DECALCOMANIAS—see TRANSFERS, Decalcomania**

**DEHUMIDIFIERS, Motor-Operated**

Active Specialty Corp., 302 N. Water St., Newburgh, N. Y.  
Air Air Refrigeration Corp., 439 Madison Ave., New York City, N. Y.  
American Blower Corp., Detroit 32, Mich.  
Dryomatic Corp., 812 N. Fairfax St., Alexandria, Va.  
Ebo Mfg. Co., 265 N. Hamilton Rd., Columbus 13, Ohio  
Fresh'n-Aire Div., Cory Corp., 221 N. LaSalle St., Chicago, Ill.  
Frigidaire Div., General Motors Corp., 300 Taylor St., Dayton 1, Ohio  
Haertel Co., Walter, 2840 4th Ave. So., Minneapolis, Minn.  
International Harvester Co., 180 N. Michigan Ave., Chicago 1, Ill.  
Kaufman Air Conditioning Co., 4505 Olive St., St. Louis, Mo.  
Lonsgan Mfg. Co., 704 Clark St., Albion, Mich.  
Mitchell Mfg. Co., 2525 Clybourn Ave., Chicago 14, Ill.  
Mueller Climatrol, 2005 W. Oklahoma Ave., Milwaukee 15, Wis.  
Remington Corp., Remington Air Conditioning Div., Willey St., Auburn, N. Y.  
Robbins & Myers, Inc., 1345 Lagonda Ave., Springfield, Ohio  
Victor Products Corp., 901 Pope Ave., Hagerstown, Md.  
Walton Laboratories, Inc., 1186 Grove St., Irvington 11, N. J.  
Westinghouse Electric Corp., Electric Appliance Div., 653 Page Blvd., Springfield 2, Mass.

**DEHYDRATORS**

Kaufman Co., H. J., 13215 Roselawn Ave., Detroit 28, Mich.  
Siebring Mfg. Co., George, Iowa

**DEMAGNETIZERS**

Annis Co., R. B., 1101 N. Delaware St., Indianapolis 2, Ind.  
Electric Arc Sales Co., 5270 Geddes Rd., Ann Arbor, Mich.  
Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill.  
Luma Electric Equipment Co., 1607 Coining Drive (P. O. Box 132), Toledo, Ohio  
Opad Electric Co., 69 Murray St., New York 7, N. Y.  
Printz Electric Co., 14501 Lesure St., Detroit 27, Mich.  
Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio  
Radio Frequency Laboratories, Inc., Boonton, N. J.  
Shrader Co., F. W., 5768 W. Washington Blvd., Culver City, Calif.

**DEODORIZERS—see GENERATORS, Ozone**

**DERRICKS and DERRICK TRUCKS, Portable**

**Pole Setting**  
Four Wheel Drive Auto Co., 105 E. 12 St., Clintonville, Wis.  
Gar Wood Industries Inc., Wayne, Mich.  
Highway Trailer Co., 405 E. Fulton St., Edgerton, N. Y.  
Holan Corp., J. H., 4100 W. 150 St., Cleveland 11, Ohio  
McCabe-Powers Auto Body Co., 5900 N. Broadway, St. Louis 15, Mo.  
Saxen Derrick Co., 3101 Grand Ave., Chicago, Ill.  
Tel-E-Lect Products, Inc., 10001 Minnetonka Blvd., Minneapolis 16, Minn.

**DETECTORS**

1. Gas
2. Ground, Industrial
3. Ground, Hospital Operating Rooms
4. High Tension
5. Metal
6. Outlet
7. Radiation

Airserco Mfg. Co., Inc., 435 Melwood St., Pittsburgh 13, Pa. (1)  
Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (5)  
Anton Electronic Laboratories, Inc., 1226 Flushing Ave., Brooklyn, N. Y. (7)  
Auth Electric Co., Inc., 34-20 49th St., L. I. C. 1, N. Y. (3)  
Automatic Switch Co., 391 Lakeside Ave., Orange, N. J. (2, 3)  
Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland 10, Ohio (1)  
Brach Mfg. Corp., 200 Central Ave., Newark, N. J. (4)  
Century Lighting Inc., 521 W. 43 St., New York 36, N. Y. (1, 2)  
Consolidated Engineering Corp., 300 N. Sierra Madre Villa, Pasadena 15, Calif. (1)  
El-Tronics, Inc., 437 N. Fifth St., Phila. 23, Pa. (1, 2, 7)



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2560 Noblestown Rd. Pittsburgh 5, Penna.

Engelhard Inc., Charles, 850 Passaic Ave., East Newark, N. J. (1)  
Farr Mfg. Co., Inc., 2125 S. Western Ave., Chicago 8, Ill. (2)  
Fisher Research Laboratory Inc., Palo Alto, Calif. (5)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (2)  
General Scientific Equipment Co., 27th & Huntingdon Sts., Phila. 32, Pa. (1)  
Georator Corp., Manassas, Va. (7)  
Goleak Co., 1544 W. Glenoaks Blvd., Glendale 1, Calif. (5, 6, 7)  
Howard Electric, 1700 N. Kostner Ave., Chicago 39, Ill. (6)  
Illinois Testing Laboratories, Inc., 420 N. LaSalle St., Chicago 10, Ill. (5)  
Insto-Gas Corp., 1977 E. Woodbridge St., Detroit 7, Mich. (1)  
Johnson-Williams Ltd., 2625 Park Blvd., Palo Alto, Calif. (1)  
Jordan Electronics, Inc., 3025 W. Mission Rd., Alhambra, Calif. (7)  
Kohler Mfg. Co., 395 Lincoln St., Marlboro, Mass. (1)  
Librascope, Inc., 808 Western Ave., Glendale 1, Calif. (7)  
Linde Air Products Co., 30 E. 42 St., N. Y. 17, N. Y. (1)  
Mine Safety Appliances Co., 201 N. Braddock Ave., Pittsburgh 8, Pa. (1)  
Minerallac Electric Co., 25 N. Peoria St., Chicago 7, Ill. (4)  
Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla. (5)  
Parr Mfg. Corp., 44 Austin St., Newark 5, N. J. (2, 3)  
Peschel Electronics, Inc., 13 Garden St., New Rochelle, N. Y. (2, 4)  
Plaster-Eye Co., 2560 Noblestown Rd., Pittsburgh 5, Pa. (5, 6)  
Pells Mfg. Co., J. D., 2904 W. 26 St., Chicago 23, Ill. (2)  
Radio Corp. of America, Engineering Products Div., Front & Cooper Sts., Camden 2, N. J. (5)  
Raytheon Mfg. Co., Waltham 54, Mass. (1)  
Signal Engineering & Mfg. Co., Branchport Ave., Long Branch, N. J. (3)  
Stanley Electric Tools, 436 Myrtle St., New Britain, Conn. (1)  
Stearns Magnetic Inc., 698 S. 28th St., Milwaukee 46, Wis. (5)  
Stromberg Time Corp., 135 S. Main St., Thomas- ton, Conn. (3)  
Tec Imports, 14525 Bessemer St., Van Nuys, Calif. (3)  
Turner Brass Works, 821 Park Ave., Sycamore, Ill. (1)  
Viking Instruments, Inc., East Haddam, Conn. (1)

## DETECTORS—see also LOCATORS

### DIALS

1. Impulse
2. Instrument

Canadian Radium & Uranium Corp., 630 Fifth Ave., New York 20, N. Y. (2)  
Connecticut Telephone & Electric Corp., 70 Britannia St., Meriden, Conn. (1)  
Emeloid Co., Inc., 1239 Central Ave., Hillside 5, N. J. (2)  
Empire Wire and Cable Co., Penn Yan, N. Y. (1)  
General Radio Co., 275 Massachusetts Ave., Cambridge 39, Mass. (2)  
Lancaster Lens Co., Lancaster, Ohio (2)  
Maymer Corp., 1961 W. 112 St., Cleveland 2, Ohio (2)  
Mica Insulator Co., P. O. Box 1076, Schenectady 1, N. Y. (2)  
Sierra Electric Corp., 15100 S. Figueroa, Gardens, Calif. (1)  
Silicone Insulation, Inc., 557 Third Ave., New York 16, N. Y. (2)  
Technology Instrument Corp., 531 Main St., Acton, Mass. (2)  
Telephonics Corp., Park Ave., Huntington, N. Y. (1)  
United States Radium Corp., 535 Pearl St., N. Y. 7, N. Y. (2)  
Wama Co., Industrial Bldg., Baltimore 2, Md. (2)

### DIES, Pipe Threading

American Pipe Tool Co., 4856 W. Kinzie St., Chicago 44, Ill.  
Armstrong Bros. Tool Co., 5200 W. Armstrong Ave., Chicago 30, Ill.  
Beaver Pipe Tools, Inc., 310 Dana Ave., N. E., Warren, Ohio  
Capwell Mfg. Co., 60-70 Governor St., Hartford 2, Conn.  
Empire Wire and Cable Co., Penn Yan, N. Y.  
Nye Tool Co., 4120-30 Fullerton Ave., Chicago 32, Ill.  
Ridge Tool Co., 400 Clark St., Elyria, Ohio  
Snap-On Tools Corp., 8028-28th Ave., Kenosha, Wis.  
Threadwell Tap & Die Co., 16 Arch St., Greenfield, Mass.  
Toledo Pipe Threading Machine Co., 1445 Summit St., Toledo 4, Ohio

### DIGGERS, Pole Hole—see AUGERS

### DIMMERS, Light

1. Manual
2. Motor Operated

Arrow-Hart & Hegeman Electric Co., 103 Hawthorn St., Hartford 6, Conn. (1)  
Associated Lighting Service, 876 Kayne St., Redwood City, Calif. (1, 2)  
Capitol Stage Lighting Co., Inc., 527 W. 45 St., New York 36, N. Y. (1, 2)  
Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (1, 2)  
General Nuclear Corp., 550 Fifth Ave., New York 27, N. Y. (2)  
General Radio Co., 275 Massachusetts Ave., Cambridge 39, Mass. (1, 2)  
Hub Electric Co., 2255 W. Grand Ave., Chicago 12, Ill. (1, 2)  
Kilgill Bros. Universal Electric Stage Lighting Co., Inc., 321 W. 50 St., N. Y. 19, N. Y. (1, 2)  
Kulka Electric Mfg. Co., Inc., 633 S. Fulton Ave., Mount Vernon, N. Y. (1)  
Lyon Rural Electric Co., 2075 Moore St., San Diego 12, Calif. (1)  
Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (1, 2)  
Peschel Electronics, Inc., 13 Garden St., New Rochelle, N. Y. (2)  
Reynolds Electric Co., 3000 River Rd., River Grove, Ill. (2)  
Rogers Electric Laboratories, Inc., 1745 Doan Ave., East Cleveland 12, Ohio (6)  
Superior Electric Co., 83 Laurel St., Bristol, Conn. (1, 2)  
Vickers Electric Div., Vickers, Inc., 1847 Locust St., St. Louis 3, Mo. (1)  
Ward Leonard Electric Co., 115 MacQuesten Parkway, South, Mount Vernon, N. Y. (1, 2)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1)

### DIMMERS, Socket—see SOCKETS, Dimming or Regulating

### DINKIES, Pole—see TRAILERS, Pole

### DISCONNECTS—see SWITCHES, Distribution and Power Circuit

### DISCS, Conduit Sealing—see SEALS, Conduit

### DISHWASHERS

1. Commercial
2. Household

Elkington Mfg. Co., 461 S. Van Ness Ave., San Francisco, Calif. (1)  
Faspray Corp., 136 Chestnut St. (P. O. Box 67), Red Bank, N. J. (1)  
Frigidaire Div., General Motors Corp., 300 Taylor St., Dayton 1, Ohio (2)  
General Electric Co., Major Appliance Div., Appliance Park, Louisville, Ky. (2)

Hotpoint Co., 5600 W. Taylor St., Chicago 44, Ill. (2)  
Jackson Products Co., 3703 E. 93 St., Cleveland 5, Ohio (1)  
James, Inc., Box 449, Independence, Kans. (2)  
Westinghouse Electric Corp., Electric Appliance Div., 246 E. Fourth St., Mansfield, Ohio (2)

### DISPOSERS

1. Fluorescent Lamp
2. Food Waste

Frigidaire Div., General Motors Corp., 300 Taylor St., Dayton 1, Ohio (2)  
General Electric Co., Major Appliance Div., Appliance Park, Louisville, Ky. (2)  
Hotpoint Co., 5600 W. Taylor St., Chicago 44, Ill. (2)  
James, Inc., Box 449, Independence, Kans. (2)  
Ladbury Co., Inc., Boston Post Rd. (P. O. Box 88), Branford, Conn. (1)  
Lockley Machine Co., 310 Grove St., New Castle, Pa. (2)  
Quilada Tool Div., Gaines-Collins Co., 5474 Alhambra Ave., Los Angeles 32, Calif. (28)  
Westinghouse Electric Corp., Electric Appliance Div., 246 E. Fourth St., Mansfield, Ohio (2)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (2)

### DITCHERS—see TRENCHERS

### DOLLIES, Appliance—see TRUCKS, Appliance

### DOLLIES, Pole—see TRAILERS, Pole

### DOOR-OPERATORS—see OPERATORS

### DRAWBARS, Trailer—see HOOKS, Towing and Pintle

### DRESSERS, Commutator—see STONES, Commutator

### DRESSING, Belt

Johnson Belting Co., Inc., 34-44 Hubert St., New York 13, N. Y.  
Stevens Co., A. T., 118 E. 28 St., N. Y. 16, N. Y.  
Ton-Tex Corp., 247 Pearl St., N. W., Grand Rapids 2, Mich.

### DRILLS

1. Electric, Portable
2. Hammer and Spring
3. Hand and Breast
4. Jolt
5. Star

Ackerman-Johnson Co., 625 W. Jackson Blvd., Chicago 6, Ill. (5)  
Arro Expansion Bolt Co., 1540 Boone Ave., Marion, Ohio (5)  
Black & Decker Mfg. Co., Towson 4, Md. (1, 5)  
Chicago Pneumatic Tool Co., 6 E. 44 St., N. Y. 17, N. Y. (1, 2)  
Cincinnati Electrical Tool Co., Madison & Edwards Rd., Cincinnati 8, Ohio (1)  
Cincinnati Tool Co., 1951 Waverly Ave., Norwood, Cincinnati 12, Ohio (5)  
Cummins Portable Tool Div., John Oster Mfg. Co., 5055 N. Lydell Ave., Milwaukee 17, Wis. (1)  
Dayton Electric Mfg. Co., 126 S. Oakley Blvd., Chicago 12, Ill. (1)  
Diamond Expansion Bolt Co., Inc., Garwood, N. J. (5)  
Fairchild Camera & Instrument Corp., Fairchild Industries Div., 110 Main St., Burlington, Vt. (1)  
Forsberg Mfg. Co., 125 Seaview Ave., Bridgeport 1, Conn. (1, 2)  
Gilbert Co., A. C., Erector Square, New Haven 6, Conn. (1)  
● GRAYBAR ELECTRIC CO., INC., 420 Lexington Ave., N. Y. 17, N. Y. (1)—ADV. PG. 2  
Guilbert Steel Co., 4001 Windgap Ave., Pittsburgh 4, Pa. (1)  
Hobas Industries, Inc., 442 Elm St., Sycamore, Ill. (5)  
Hykon Mfg. Co., 163 E. State St., (P. O. Box 923), Alliance, Ohio (4)  
Jones Motrola Corp., 432 Fairfield Ave., Stamford, Conn. (1)  
Kett Tool Co., 5 E. Third St., Cincinnati 2, Ohio (4)  
Kratzer & Co., Inc., 585 18th Ave., Newark 3, N. J. (5)  
Lindell Electric Co., 115 E. 58 St., Minneapolis 23, Minn. (4)  
Lint, Clyde W., 2323 W. 18 St., Chicago 8, Ill. (1, 4)  
Mall Tool Co., 7740 S. Chicago Ave., Chicago 19, Ill. (1)  
Mayhew Steel Products, Inc., Sears St. Extension, Shelburne Falls, Mass. (5)  
Mephisto Tool Co., Inc., Box 16, Hudson, N. Y. (5)  
Millers Falls Co., 57 Wells St., Greenfield, Mass. (1, 2, 3, 5)  
Milwaukee Electric Tool Corp., 5352 W. State St., Milwaukee 8, Wis. (1)  
Oxwall Tool Co. Ltd., 928 Broadway, New York 10, N. Y. (3)  
P & C Hand Forged Tool Co., Box 5926, Milwaukee P. O., Portland 22, Ore. (3, 5)  
Paine Co., Fullerton Ave. & Westgate Rd., Addison, Ill. (5)

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Hammer your work to masonry—quickly, easily. No wrenches or screw drivers needed. Catalog No. 3900.



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New closed bottom design keeps dust and dirt out of threads. For use with machine screws or bolts. Catalog No. 4000.



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Porter-Cable Machine Co., 1714 N. Salina St., Syracuse 8, N. Y. (1)  
Rawlings Co., Inc., 271 Church St., N. Y. 13, N. Y. (5)  
Salem Tool Co., 767 S. Ellsworth Ave., Salem, Ohio (3)  
Skill Corp., 5033 Elston Ave., Chicago 30, Ill. (1)  
Snap-On Tools Corp., 8028-28th Ave., Kenosha, Wis. (1, 2)  
SpeedWay Mfg. Co., 1834 S. 52 Ave., Cicero 50, Ill. (1)  
Star Expansion Bolt Co., 147 Cedar St., N. Y. 6, N. Y. (3, 5)  
Syntron Co., 690 Lexington Ave., Homer City, Pa. (1)  
Tempo Products Co., 2075 E. 65 St., Cleveland 3, Ohio (5)  
Thor Power Tool Co., 175 N. State St., Aurora, Ill. (1)  
U. S. Expansion Bolt Co., State St. & P.R.R., York, Pa. (5)  
Vanadium Tool Co., Box 322, Athens, Ohio (5)  
Wodack Electric Tool Corp., 4627 W. Huron St., Chicago 44, Ill. (1, 2)  
Yankee Tools, Lehigh Ave. & American St., Phila. 33, Pa. (5)

**DRILLS**—see also BORERS; AUGERS

### DRIVERS

1. Ground Rod
2. Nail

Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (2)  
Goodrich Co., B. F., Industrial Products Div., 500 S. Main St., Akron, Ohio (2)  
Kearney Corp., James R., 4236 Clayton Ave., St. Louis 10, Mo. (1)  
Kortik Mfg. Co., 5600 Third St., San Francisco 24, Calif. (1)  
Millers Falls Co., 57 Wells St., Greenfield, Mass. (2)  
Safety Live Line Tool Co., 973 86th Ave., Oakland 21, Calif. (1)  
Tel-E-Lect Products, Inc., 10001 Minnetonka Blvd., Minneapolis 16, Minn. (1)  
Utilities Safety Supply Co. Inc., 3112 Indiana Ave., Kansas City 3, Mo. (1)

### DRIVERS, Misc.

Pipe—see **PUSHERS**, Pipe  
Wedge—see **TOOLS**, Armature Repair

### DRIVES, Power

1. Adjustable Speed
2. V-Belt

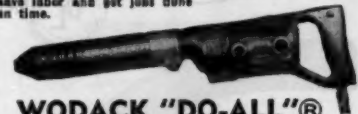
Accurate Engineering Co., 2005 Blue Island Ave., Chicago 8, Ill. (1)  
Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (1, 2)  
Allis Co., Louis, 427 E. Stewart St., Milwaukee 7, Wis. (1)  
American Blower Corp., Detroit 32, Mich. (1)  
American Pulley Co., 4200 Wissahickon Ave., Phila. 29, Pa. (1, 2)  
Arrow-Hart & Hegeman Electric Co., 103 Hawthorn St., Hartford 6, Conn. (1)  
Boston Woven Hose & Rubber Co., P. O. Box 1071, Boston 3, Mass. (2)  
Bogue Electric Mfg. Co., 52 Iowa Ave., Paterson 3, N. J. (1)  
Browning Mfg. Co., Mayville, Ky. (2)  
Congress Drives Div., Tann Corp., 3750 E. Outer Dr., Detroit 34, Mich. (2)  
Dodge Mfg. Corp., 1944 S. William St., Mishawaka, Ind. (1, 2)  
Electric Machinery Mfg. Co., 800 Central Ave., Minneapolis 13, Minn. (1)  
Equi-Dyne, Inc., 5729 W. Ohio St., Chicago 44, Ill. (1, 2)  
Fairchild Engine & Airplane Corp., Speed Control Div., 90 Iberia St., St. Augustine, Fla. (1, 2)  
General Radio Co., 275 Massachusetts Ave., Cambridge 39, Mass. (1)  
Gerbing Mfg. Corp., 11800 Milwaukee Ave., Northbrook, Ill. (1, 2)  
Lima Electric Motor Co., Findlay Road, Lima, Ohio (1)  
Link-Belt Co., 307 N. Michigan Ave., Chicago 1, Ill. (1, 2)  
Lovejoy Flexible Coupling Co., 4963 W. Lake St., Chicago 44, Ill. (1, 2)  
Machinery Electrification, Inc., Northboro, Mass. (1)  
Magnetic Amplifiers, Inc., 632 Tinton Ave., N. Y. 55, N. Y. (1)  
Reeves Pulley Co., Inc., 1225 7th St., Columbus, Ind. (1)  
Reliance Electric & Engineering Co., 1068 Ivanhoe Rd., Cleveland 10, Ohio (1)  
Sterling Electric Motors, Inc., 5401 Telegraph Rd., Los Angeles 22, Calif. (1)  
U. S. Electrical Motors, Inc., 200 E. Slauson Ave., Los Angeles 54, Calif. (1)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1)  
Worthington Corp., Worthington Ave., Harrison, N. J. (2)

### DRIVES, Misc.

Chain—see **CHAIN**, Transmission  
Flexible Shaft—see **SHAFTS**, Flexible

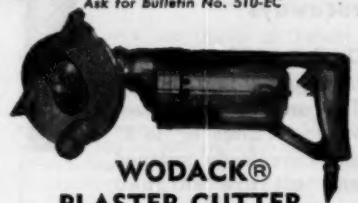
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Smooths and roughens masonry surfaces  
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Cuts channels in plaster for conduit and oxygen tubing, as in hospitals  
Cuts openings in plaster (using single wheel)  
Adjustable for depth and width of cut  
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Variable Speed—see **TRANSMISSIONS**, Variable Speed  
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2. Household

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Easy Washing Machine Corp., Solar, Spencer & Clinton Sts., Syracuse 1, N. Y. (2)  
Electronic Towel Corp., 342 Madison Ave., New York 17, N. Y. (1)  
Empire Wire and Cable Co., Penn Yan, N. Y. (1)  
Frigidaire Div., General Motors Corp., 300 Taylor St., Dayton 1, Ohio (2)  
Hotpoint Co., 5600 W. Taylor St., Chicago 44, Ill. (2)  
Hoyt Mfg. Corp., Forge Rd., Westport, Mass. (1, 2)  
Koch Sons, Inc., George, P. O. Box 358, Evansville, Ind. (1)  
Speed Queen Corp., Ripon, Wis. (2)  
Westinghouse Electric Corp., Electric Appliance Div., 246 E. Fourth St., Mansfield, Ohio (2)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (2)

**DRYERS, Infrared**—see **HEATERS**, Space, Electric Radiant (Infrared Lamp Fixtures)

### OVENS, Infrared

### DUCK, Varnished

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General Electric Co., Chemical & Metallurgical Div., Pittsfield, Mass.  
Mica Insulator Co., P. O. Box 1076, Schenectady 1, N. Y.

**DUCT, Cable**—see **CONDUIT**; **RACEWAY**; **WIREWAYS**

**DUCT, Power**—see **BUSWAYS**

**DUCT, Trolley**—see **BUSWAYS**, Trolley

**DUCT, Underfloor**—see **RACEWAY**, Metal, Underfloor; **RACEWAY**, Metal, Cellular Floor

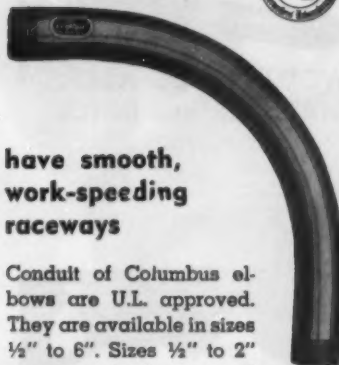
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90° and 45°



have smooth,  
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Conduit of Columbus elbows are U.L. approved. They are available in sizes 1/2" to 6". Sizes 1/2" to 2" are conveniently cartoned and all are shipped promptly from factory or from one of ten strategically located warehouses.

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Robot Appliances, Inc., 7041 Orchard St., Dearborn, Mich.  
Rotary Lift Co., 1054 Kansas St., Memphis 2, Tenn.  
Southeastern Elevator Co., 81 Currier St., N. E., Atlanta, Ga.  
Spindel Elevator Corp., 245 W. Buttonwood St., Reading, Pa.  
Warner Elevator Mfg. Co., 2613 Spring Grove Ave., Cincinnati 14, Ohio

DUST COLLECTORS—see COLLECTORS, Dust

DYNAMOMETERS, Testing

Dynatomic Div., Easton Mfg. Co., Kenosha, Wis.  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo.  
Nankervis Co., Geo. L., 19255 W. Davison Ave., Detroit 23, Mich.  
Potter & Rayfield, Inc., P. O. Box 1042, Atlanta, Ga.  
Reliance Electric & Engineering Co., 1068 Ivanhoe Rd., Cleveland 10, Ohio  
Scherr Co., Inc., George, 200 Lafayette St., N. Y. 12, N. Y.  
Simpson Electric Co., 5200 W. Kinzie St., Chicago 44, Ill.  
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.

DYNAMOS—see GENERATORS

DYNAMOTORS

Dalmotor Co., 1375 Clay St., Santa Clara, Calif.  
Electric Specialty Co., 211 South St., Stamford, Conn.  
Electro Engineering Products Co., Inc., 609 W. Lake St., Chicago 6, Ill.  
General Armature & Mfg. Co., P. O. Box 370, Lock Haven, Pa.  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
Holtzer-Cabot Div., National Pneumatic Co., Inc., 125 Amory St., Boston 19, Mass.  
Small Motors Inc., 2076 Elston Ave., Chicago 14, Ill.  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.

E

EARS, Outlet Box

Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill.  
Arrolet Corp., Foot of Bower St., Montgomery, Pa.  
Fluores-O-Lite Co., Evans Terminal, North Broad St., Hillside 5, N. J.  
Thapitt Mfg. Co., Gregg & Hammond Sts., Carnegie, Pa.  
Union Insulating Co., Inc., Box 351, Parkersburg, W. Va.

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2. Conduit, Rigid, Large Radius
3. EMT
4. Entrance
5. Surface Raceway

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Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. (1, 2, 3, 4)  
Chase Brass & Copper Co., Inc., 236 Grand St., Waterbury 20, Conn. (3)  
Clifton Conduit Co., Inc., 75 Montgomery St., Jersey City 2, N. J. (1, 2, 3)  
Conduit Pipe Products Co., 157 W. Fulton St., Columbus 16, Ohio (1, 2, 3)  
Crouse-Hinds Co., Syracuse 1, N. Y. (4)  
Duro Fittings Co., 2040 Santa Fe Ave., Los Angeles 21, Calif. (4)  
Electrical Engineers Equipment Co., 25th Ave. & Division St., Melrose Park, Ill. (3)  
Electrical Fittings Corp., 37-50 57th St., Woodside 77, N. Y. (1, 2, 3, 4)  
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General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn. (1, 3)  
Howard Electric, 1700 N. Kostner Ave., Chicago 39, Ill. (4)  
Keystone Mfg. Co., 23328 Sherwood Rd., Centerline, Detroit, Mich. (5)  
Killark Electric Mfg. Co., 3940 Easton Ave., St. Louis 13, Mo. (1, 4)  
Line Material Co., 700 W. Michigan St., Milwaukee, Wis. (1)  
Mark & Co., Clayton, 1900 Dempster St., Evanston, Ill. (1, 3)  
Metalectrics Inc., 677 Broadway, N. Y. 12, N. Y. (4)  
• MIDWEST ELECTRIC MFG. CO., 1639 Walnut St., Chicago 12, Ill. (1, 3, 4)—ADV. PG. 104-105  
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save space... come  
in new large sizes, too

Corner Pull-In Elbows are ideal for space-saving, machine wiring, easy wire pulling. Besides the usual 1/2", 3/4" and 1" sizes, Gedney alone brings you the new big sizes, 1 1/4", 1 1/2" and 2". They're all cadmium plated for longest life... made of malleable iron to eliminate breakage.

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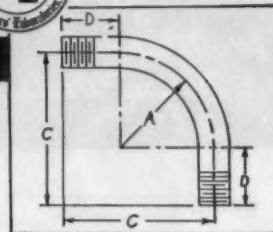


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## LARGE RADIUS 90° ELBOW



radius "A" inches	offset "C"	straight end "D"	length unbent	pipe size
12"	1'9"	9"	3'0"	1"-2 1/2" inc.
15"	2'0"	9"	3'6"	1"-3" inc.
18"	2'4"	10"	4'0"	1"-3 1/2" inc.
24"	2'11"	11"	4'11"	1"-4" inc.
30"	3'5"	11"	5'9"	1"-5" inc.
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42"	4'6"	12"	7'6"	1"-6" inc.
48"	6'0"	12"	8'4"	1"-6" inc.

Also available 45°, 30° and 60°.

All are U.L. approved.

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—ADV. PG. 122-123  
Spang-Chalfant Div., National Supply Co., Two Gateway Center (P. O. Box 416), Pittsburgh 30, Pa. (1, 2, 3)  
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Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (1, 2, 4)  
Steelduct Co., Republic Bldg., Youngstown, Ohio (1, 2, 3)  
Thapitt Mfg. Co., Gregg & Hammond Sts., Carnegie, Pa. (1)  
Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J. (1, 3, 4)  
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Electrocutting Fly Screen Div., Detjen Corp., Skidmore Rd., Freedom Plains, Pleasant Valley 1, N. Y.  
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Langwin Mfg. Corp., 37 W. 65 St., N. Y. 23, N. Y.  
Lyon Rural Electric Co., 2075 Moore St., San Diego 12, Calif.

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American Brass Co., 414 Meadow St., Waterbury 20, Conn. (3)



Arcos Corp., 1500 S. 50 St., Phila. 43, Pa. (3)  
Carbon Engineering Corp., P. O. Box 236, Slinger, Wis. (3)  
Chapin Co., Inc., Chas. E., 227 Fulton St., N. Y. 7, N. Y. (1, 3)  
Crucible Steel Co. of America, P. O. Box 88, Henry W. Oliver Bldg., Pittsburgh 30, Pa. (3)  
Elster Engineering Co., Inc., 750 S. 13 St., Newark 3, N. J. (3)  
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Haynes Stellite Co., 725 S. Lindsay St., Kokomo, Ind. (3)  
Hobart Bros., Hobart Square, Troy 1, Ohio (3)  
Kaiser Aluminum & Chemical Sales, Inc., 919 N. Michigan Ave., Chicago 11, Ill. (3)  
Lincoln Electric Co., 22801 St. Clair Ave., Cleveland 17, Ohio (3)  
National Carbon Co., 30 E. 42 St., N. Y. 17, N. Y. (1, 3)  
Page Steel & Wire Div., American Chain & Cable Co., Inc., First & River Sts., Monessen, Pa. (3)  
Peer, Inc., 1220 Milton St., Benton Harbor, Mich. (3)  
Pure Carbon Co., Inc., 441 Hall Ave., St. Marys, Pa. (3)  
Speer Carbon Co., International Graphite & Electrode Div., Theresa St., St. Marys, Pa. (1)  
Stackpole Carbon Co., Tannery St., St. Marys, Pa. (3)  
Swedish Iron & Steel Corp., 100 Quimby St., Westfield, N. J. (2)  
Sylvania Electric Products, Inc., 1740 Broadway, N. Y. 19, N. Y. (3)  
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**ELECTRODES, Carbon**—see **CARBONS, Arc Lamp**; **ELECTRODES, Welding**

**ELECTROLYTE, Storage Battery**—see **ACID, Battery**

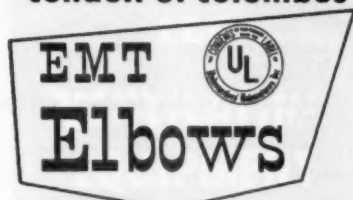
**ELECTROMAGNETS**—see **MAGNETS, Lifting**; **SEPARATORS, Magnetic**

**ELECTROPLATERS**—see **PLATERS**

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Syntron Co., 690 Lexington Ave., Homer City, Pa.  
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**Conduit COLUMBUS, OHIO**

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1. Appliance
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3. Radiant
4. Resistance

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Falcon Equipment Co., 13th St., New Brighton, Pa. (4)  
Ferro Electric Products Inc., Kirkland, Ill. (1)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 4)  
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Micacraft Products, Inc., 701-03 McCarter Highway, Newark 5, N. J. (4)  
Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla. (4)  
Norton Co., 1 New Bond St., Worcester 6, Mass. (2)  
Pereny Equipment Co., 893 Chambers Rd., (Station A, Box 153), Columbus, Ohio (2)  
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Ranger Electric Mfg. Corp., 25-38 Astoria Blvd., Astoria, L. I., N. Y. (4)  
Rodale Mfg. Co., Inc., 6th & Minor Sts., Emmaus, Pa. (4)  
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Tuttle & Kift, Inc., 1823 N. Monitor St., Chicago 39, Ill. (1)  
Waage Mfg. Co., 632 North Albany Ave., Chicago 12, Ill. (1, 3, 4)  
Waage Electric, Inc., 720 Colfax Ave., Kenilworth, N. J. (1, 3, 4)  
Wall Mfg. Co., P. O. Box 71, Grove City, Pa. (4)  
Wells Mfg. Co., 220 Ninth St., San Francisco 3, Calif. (4)  
Wesix Electric Heater Co., 390 First St., San Francisco 5, Calif. (1, 3, 4)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1)  
● **WIEGAND CO., EDWIN L.**, 7637 Thomas Blvd., Pittsburgh 8, Pa. (1, 2, 3, 4)—ADV. PG. 146

## ELEMENTS, Misc.

**Fuse**—see **LINKS, Fuse**  
**Thermal Relay Heater**—see **CUTOUPS, Thermal**  
**Thermocouple**—see **THERMOCOUPLES**  
see also **HEATERS**

## ELEVATORS, Electric

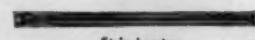
1. Freight
2. Passenger
3. Sidewalk

Bay State Elevator Co., Springfield 1, Mass. (1, 2, 3)  
Chelsea Elevator Co., 549-551 W. 52 St., New York 19, N. Y. (1, 2, 3)  
Cheney Co., W. E., 735 N. 34 St., Milwaukee 8, Wis. (2)  
Hollister-Whitney Co., 211 N. Second St., Quincy, Ill. (1, 2, 3)  
Inclinator Co. of America, 2200 Paxton St., Harrisburg, Pa. (2)  
Kieckhefer Elevator Co., A., 1100 W. St. Paul Ave., Milwaukee 3, Wis. (1, 2, 3)  
Lewis-Shepard Products, Inc., 125 Walnut St., Watertown, Mass. (1, 3)  
Montgomery Elevator Co., 30 20th St., Moline, Ill. (1, 2)  
Rakit Corp., 711 S. 50th St., Phila. 43, Pa. (1, 2, 3)  
Rotary Lift Co., 1054 Kansas St., Memphis 2, Tenn. (1, 2, 3)  
Southeastern Elevator Co., 81 Currier St., N. E., Atlanta, Ga. (1, 2, 3)  
Southern Elevator Co., Inc., 221 Ash St. (P. O. Box 2528), Greensboro, N. C. (1, 2, 3)

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Immersion heater



Strip heater

Calrod\* immersion and strip heaters are adaptable to hundreds of heating uses in industry. Immersion units offer most economical method of heating liquids in tanks, kettles, metal barrels, etc. Water heaters are rated at 230 volts up to 10 kw. Up to and through the 5 kw rating, 115-volt heaters are available. Oil heaters are rated at 230 volts, but 115-volt units are also available.

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Consult classified section of phone book for address of nearest G-E Apparatus Agent. Distributor, or write direct to General Electric Co., Section 640-3961, Schenectady 5, N.Y.

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Speidel Elevator Corp., 245 W. Buttonwood St., Reading, Pa. (1, 2, 3)  
Warner Elevator Mfg. Co., 2613 Spring Grove Ave., Cincinnati 14, Ohio (1, 2, 3)  
Watson Elevator Co., Inc., 220 S. Main St., Warsaw, N. Y. (1, 2, 3)  
West Bend Equipment Corp., 16 Water St., West Bend, Wis. (1, 3)  
Westinghouse Electric Corp., Elevator Div., 150 Pacific Ave., Jersey City 4, N. J. (1, 2)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2)

**ELIMINATORS, Static**—see **NEUTRALIZERS**

**ELLS, Service**—see **FITTINGS, Conduit**

**EMT**—see **CONDUIT, EMT**

**ENAMELS, Insulating**—see **PAINT, Insulating**

## ENCLOSURES

1. Sheet Metal
2. Transformer
3. Wire Mesh

Air & Refrigeration Corp., 439 Madison Ave., New York City, N. Y. (1)  
American Electronics, Inc., 4811 Telegraph Rd., Los Angeles 22, Calif. (1)  
Associated Lighting Service, 876 Kayne St., Redwood City, Calif. (1, 2)  
Bernard-Franklin Co., Inc., Hedley & Balfour Sts., Phila. 37, Pa. (1)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (2)  
Chicago Wire Iron & Brass Works, 2411 W. Belmont Ave., Chicago 18, Ill. (1, 2, 3)  
Electric Service Engineering Co., 10 Third Ave., Joliet, Ill. (1, 2)  
Empire Switchboard Co., Inc., 810 Fourth Ave., Brooklyn 32, N. Y. (1)  
Falstrom Co., 62 Falstrom Court, Passaic, N. J. (1)  
General Switch Corp., 45 Roebing St., Brooklyn 11, N. Y. (1, 2)  
Gustavson, Inc., 8600 Chestnut St., Kansas City 30, Mo. (1)  
Hoffman Engineering Corp., Anoka, Minn. (1)  
Newark 5, N. J. (2)  
Hope Electrical Products Co., Inc., 338 Wilson Ave., Karp Metal Products Co., 233 63rd St., Brooklyn 20, N. Y. (1)

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**2 POTENTIAL . . .**

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Meter Test Blocks, Portable Yard Lights**



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Kuhman Electric Co., 1000 26th St., Bay City, Mich. (2)  
Meter Devices Co., 1001 Prospect Ave. S. W., Canton 6, Ohio (1, 2)  
Mullenbach Div., Electric Machinery Mfg. Co., 2300 E. 27th St., Los Angeles 58, Calif. (1)  
Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla. (1, 2)  
Overly-Hautz Co., 11500 Madison Ave., Cleveland 2, Ohio (1, 2, 3)  
Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (1)  
Pucel Enterprises, Inc., 3746 Kelley Ave., Cleveland 14, Ohio (1)  
Rowan Controller Co., 2315 Homewood Ave., Baltimore 18, Md. (1)  
Royal Switchboard Co., Inc., 460 Driggs Ave., Brooklyn 11, N. Y. (1)  
Scam Instrument Corp., 3909 Irving Park Rd., Chicago 18, Ill. (1)  
Spelzer Elevator Corp., 245 W. Burtonwood St., Reading, Pa. (1)  
Sun Electric Products, Inc., 28 S. Day St., Orange, N. J. (1, 2)

**ENCLOSURES—see also CABINETS; FENCING**

## ENGINES, Diesel

Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis.  
Brush Aboe, Inc., 60-07 39th Ave., Woodside 77, Long Island, N. Y.  
Buda Co., 145 & Commercial Ave., Harvey, Ill.  
Caterpillar Tractor Co., Peoria 8, Ill.  
Chicago Pneumatic Tool Co., 6 E. 44 St., New York 17, N. Y.  
Fairbanks, Morse & Co., 600 S. Michigan Ave., Chicago 5, Ill.  
Hallett Mfg. Co., 1601 W. Florence Ave., Inglewood, Calif.  
Koppers Co., Inc., Koppers Bldg., Pittsburgh 19, Pa.  
Nordberg Mfg. Co., 3073 S. Chase Ave., Milwaukee 1, Wis.  
Onan & Sons Inc., D. W., University Ave. S. E. at 25th, Minneapolis 14, Minn.  
Sheppard Co., Inc., R. H., 101 Philadelphia St., Hanover, Pa.  
Worthington Corp., Worthington Ave., Harrison, N. J.

**ENGINE-GENERATORS—see PLANTS**

**ESUTCHEONS—see PLATES, Name**

**ETCHERS, Electric—see MARKERS, Tool**

**ESTIMATING SERVICE—see SERVICES, Estimating and Pricing**

## EXCITERS, Generator

American Electronics, Inc., 4811 Telegraph Rd., Los Angeles 22, Calif.  
Brush Aboe, Inc., 60-07 39th Ave., Woodside 77, Long Island, N. Y.  
Century Electric Co., 1806 Pine St., St. Louis 3, Mo.  
Electric Specialty Co., 211 South St., Stamford, Conn.  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
General Nuclear Corp., 550 Fifth Ave., New York 27, N. Y.  
Reliance Electric & Engineering Co., 1068 Ivanhoe Rd., Cleveland 10, Ohio  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.

## EXTENSIONS

1. **Bit**  
2. **Fixture, Switch Pull Arm**  
Electrical Fittings Corp., 37-50 57th St., Woodside 77, N. Y. (2)  
Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (2)  
General Steel Fittings Co., 1921 21st St., Racine, Wis. (2)  
● **GREENLEE TOOL CO., 2136 Twelfth St., Rockford, Ill. (1)—ADV. PG. 102-103**  
Mayhew Steel Products, Inc., Sears St. Extension, Shelburne Falls, Mass. (1)  
Mephisto Tool Co., Inc., Box 16, Hudson, N. Y. (1)  
Metallectrics, Inc., 677 Broadway, N. Y. 12, N. Y. (2)  
Millers Falls Co., 57 Wells St., Greenfield, Mass. (1)  
Rattan Mfg. Co., 10 Wall St. (P. O. Box 1745), New Haven 7, Conn. (2)  
Yankee Tools, Lehigh Ave. & American St., Philadelphia 33, Pa. (1)  
Yorkville Metal Products Co., 677 Broadway, N. Y. 12, N. Y. (2)

## EXTENSIONS, Misc.

**Cord—see CORD**  
**Fixture Nipple—see STUDS, Fixture**  
**Floor Box—see NOZZLES, Floor Box**  
**Surface Wiring—see RACEWAY**  
**Underplaster—see RACEWAY, Metal, Underplaster Extension**

**EXTERMINATORS, Insect—see ELECTROCU-TORS, Insect**

## EXTINGUISHERS, Fire

1. **Portable**
2. **Systems, Complete**

American-LaFrance-Foamite Corp., 135 East LaFrance St., Elmira, N. Y. (1, 2)  
Ansul Chemical Co., Marinette, Wis. (1, 2)  
AutoFRTSop Co., 2035 Washington Ave., Philadelphia, Pa. (1, 2)  
Electra Protection Co., Inc., 127 N. Lake Ave., Albany 6, N. Y. (2)  
Fletox System, Inc., 122 Naubuc Ave., (P. O. Box 174), Glastonbury, Conn. (1)  
Fyr-Fyter Co., 221 Crane St., Dayton 1, Ohio (1)  
Kent Extinguisher Co., 830 Front, N. W., Grand Rapids, Mich.  
Kidd & Co., Inc., Walter, 459 Main St., Belleville, N. J. (1, 2)  
Leibfried Mfg. Corp., C. H., 95-101 Guernsey St., Brooklyn 22, N. Y. (1)  
Snyder & Son, Inc., M. L., Jasper & York Sts., Philadelphia 25, Pa. (1)

## EXTRACTORS

1. **Bearing**
2. **Broken Screw and Tap**

Blackhawk Mfg. Co., 5325 W. Rogers, Milwaukee 46, Wis. (2)  
Crozier Machine Tool Co., 684 N. Prairie Ave., Hawthorne, Calif. (1)  
Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio (1)  
Owatonna Tool Co., Owatonna, Minn. (1)  
Prato Tools, Box 3519 Terminal Annex, Los Angeles 54, Calif. (2)  
Ridge Tool Co., 400 Clark St., Elyria, Ohio (2)  
Rodick Tool Co., 1023 N. Pauline (P. O. Box 109), Anaheim, Calif. (2)  
Walton Co., Box 5, Elmwood Branch, Hartford 10, Conn. (2)  
Whitman & Barnes Div., United Drill and Tool Corp., 40600 Plymouth Rd., Plymouth, Mich. (2)

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Alrasco Mfg. Co., Inc., 435 Melwood St., Pittsburgh 13, Pa.  
American Brass Co., 414 Meadow St., Waterbury 20, Conn.  
Chase Brass & Copper Co., Inc., 236 Grand St., Waterbury 20, Conn.  
Federal Screw Products, Inc., 3917-25 N. Kedzie Ave., Chicago 18, Ill.  
General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill.  
Revere Copper & Brass Co., Inc., 230 Park Ave., N. Y. 17, N. Y.  
Steel Co., Herman D., 225 Lafayette Bldg., Philadelphia 6, Pa.

## EYES, Misc.

**Bolt—see FITTINGS, Insulator**  
**Bolt—see NUTS**  
**Electric—see CELLS, Photo-Electric**  
**Screw—see SCREWEYES**  
**Socket—see FITTINGS, Insulator; INSULATORS**

**F**

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2. **Combined with Lighting Fixtures**
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4. **Industrial Propeller**
5. **Pedestal**
6. **Portable**

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Air Controls, Inc., 2310 Superior Ave., Cleveland 14, Ohio (4, 6)  
Allen Cooler & Ventilator, Inc., 704 Woodward St., Rochester, Minn. (4)  
American Blower Corp., Detroit 32, Mich. (4)  
Ammerman Co., C. L., 110 N. 2nd St., Minneapolis, Minn. (4)  
Argo Products Co., 1008 N. 22 St., St. Louis 6, Mo. (5)  
Atlas Tool & Mfg. Co., 5147 Natural Bridge Blvd., St. Louis 15, Mo. (6)  
Baldor Electric Co., 4353 Duncan Ave., St. Louis 10, Mo. (5, 6)  
Berns Mfg. Corp., 3050 N. Rockwell St., Chicago, Ill. (3, 4, 5, 6)  
Bertram Co., Harvey P., 561-565 Reading Rd., Cincinnati 2, Ohio (4)  
Buffalo Forge Co., 490 Broadway, Buffalo 5, N. Y. (4, 5)  
Century Fan & Ventilator Co., 45 Cedar St., Stamford, Conn. (4)  
Chelsea Fan and Blower Co., 639 South Ave., Plainfield, N. J. (1, 3, 4, 5, 6)  
Chrom-Ever Co., 65 Kinkel St., Westbury, L. I., N. Y. (5, 6)  
Commercialaire, Inc., 300 Pacific St., Brooklyn 1, N. Y. (1, 4, 5, 6)  
Coppus Engineering Corp., 344 Park Ave., Worcester 2, Mass. (4, 6)  
Dayton Electric Mfg. Co., 126 S. Oakley Blvd., Chicago 12, Ill. (3, 4, 5, 6)  
Diehl Mfg. Co., 1187 Finden Ave., Somerville, N. J. (1, 3, 4, 5, 6)

Dominion Electric Corp., 150 Elm St., Mansfield, Ohio (1, 6)  
 Emerson Electric Mfg. Co., 8100 Florissant Ave., St. Louis 21, Mo. (1, 2, 3, 4, 5, 6)  
 Folsom Co., Inc., 3104 Oak Lane, Dallas 10, Tex. (1, 3, 6)  
 Fresh-Aire Div., Cory Corp., 221 N. LaSalle St., Chicago, Ill. (1, 3, 5, 6)  
 Frigid, Inc., 128-168 32nd St., Brooklyn 32, N. Y. (1, 3, 4, 5, 6)  
 General Electric Co., Small Appliance Div., 1285 Boston Ave., Bridgeport 2, Conn. (1, 3, 5, 6)  
 Gilbert Co., A. C., Erector Square, New Haven 6, Conn. (1)  
 ● GUTH CO., EDWIN F., 2615 Washington Blvd., St. Louis 3, Mo. (2)—ADV. PG. 129  
 Hamilton Fan & Blower Co., 2266 Bogen St., Cincinnati 14, Ohio (1, 4, 5, 6)  
 Hartzell Propeller Fan Co., S. Englert Ave., Piqua, Ohio (4, 5)  
 Hasco Electric Corp., 11 Crary Ave., Mount Vernon, N. Y. (2)  
 Hunter Fan & Ventilating Co., 400 S. Front St., Memphis, Tenn. (1, 2, 3, 4, 5, 6)  
 Ilg Electric Ventilating Co., 2850 N. Pulaski Rd., Chicago 41, Ill. (1, 4, 5, 6)  
 International Engineering, Inc., P. O. Box 973, Dayton 1, Ohio (4)  
 International Oil Burner Co., Fan Div., 3800 Park Ave., St. Louis 10, Mo. (1, 6)  
 Jenn Air Products Co., Inc., 333 N. Pennsylvania St., Indianapolis 4, Ind. (4)  
 Kisco Co., Inc., 2414 De Kalb St., St. Louis 4, Mo. (3, 6)  
 Knapp-Monarch Co., Bent & Potomac, St. Louis 16, Mo. (1, 3, 6)  
 Koppers Co., Inc., Koppers Bldg., Pittsburgh 19, Pa. (4)  
 Koppers Co., Inc., Metal Products Div., 200 Scott St., Baltimore 3, Md. (4)  
 Mfg. Co., Inc., 4510 White Plains Rd., New York 70, N. Y. (3, 5, 6)  
 Lau Blower Co., 2001 Home Ave., Dayton 7, Ohio (6)  
 Le John Mfg. Co., Inc., 111 Twenty-Second St., Huntington, W. Va. (1, 3)  
 Markel Electric Products, Inc., 145 Seneca St., Buffalo 3, N. Y. (6)  
 Martin Fan & Blower Co., 4634 W. 21st Pl., Chicago 50, Ill. (1, 3, 4, 6)  
 McLarty Systems, 2600 Dickman Rd., Battle Creek, Mich. (3, 4, 6)  
 Meier Electric and Machine Co., Inc., 3525 E. Washington St., Indianapolis 7, Ind. (4, 5)  
 Mimar Products, Inc., 138 Spencer St., Brooklyn 5, N. Y. (1, 3, 5, 6)  
 Mine Safety Appliances Co., 201 N. Braddock Ave., Pittsburgh 8, Pa. (6)

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 Perfect-Line Mfg. Corp., Old Country Rd. & Railroad Ave., P. O. Box 65, Hicksville, L. I., N. Y. (2, 4)  
 Phelps Fan Mfg. Co., 715 Thomas St., Little Rock, Ark. (4)  
 Reed Unit-Fans, Inc., 1001 St. Charles Ave., New Orleans, La. (4, 6)  
 Reynolds Electric Co., 3000 River Rd., River Grove, Ill. (1, 5)  
 Robbins & Myers, Inc., Fan Div., 387 S. Front St., Memphis, Tenn. (1, 2, 3, 4, 5, 6)  
 Robbins & Myers, Inc., 1345 Lagonda Ave., Springfield, Ohio (1, 2)  
 Robinson Ventilating Co., Zellenople, Pa. (4, 5)  
 Safety Car Heating and Lighting Co., Inc., P. O. Box 904, New Haven 4, Conn. (1)  
 Standard Electric Mfg. Co., Inc., Haddon Ave., West Berlin, N. J. (5)  
 Stratfield Co., 434 Grand St., Bridgeport 4, Conn. (6)  
 Sutton Corp., O. A., 1812 W. Second, Wichita, Kans. (1, 3, 5, 6)  
 Trane Co., La Crosse, Wis. (4)  
 United Blower Co., Inc., 193 Centre St., N. Y. 13, N. Y. (4, 5, 6)  
 United Electric Motor Co., 178 Centre St., N. Y. 13, N. Y. (6)  
 Valley Fan Mfg. Co., Box 206, Fort Valley, Ga. (4, 6)  
 Viking Air Conditioning Div., National-U. S. Radiator Corp., 5601 Walworth Ave., Cleveland 2, Ohio (6)  
 Welch Co., W. W., 1010 Enquirer Bldg., Cincinnati 2, Ohio (3, 5, 6)  
 Westinghouse Electric Corp., Electric Appliance Div., 246 E. Fourth St., Mansfield, Ohio (3, 5, 6)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (3, 5, 6)  
 Westinghouse Electric Corp., Sturtevant Div., Damon St., Hyde Park, Boston 36, Mass. (4, 5)  
 Wind-Way Fan & Ventilator Co., 531 St. Joseph St., New Orleans 12, La. (4)

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2. Pedestal
3. Roof
4. Wall
5. Window

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 Allen Cooler & Ventilator, Inc., 704 Woodward St., Rochester, Minn. (3, 4)  
 American Blower Corp., Detroit 32, Mich. (3, 4)  
 American Cooler Corp., 3605 Mayflower St. (P. O. Box 2300), Jacksonville 3, Fla. (3, 4, 5)  
 Ammerman Co., C. L., 110 N. 2nd St., Minneapolis, Minn. (3, 4)  
 Arex Co., 612 N. Michigan Ave., Chicago 11, Ill. (3)  
 Argo Products Co., 1008 N. 22 St., St. Louis 6, Mo. (2, 4, 5)  
 Artra Aluminum Foundry & Mfg. Co., 16 E. Madison St., St. Charles, Mo. (5)  
 Baldor Electric Co., 4353 Duncan Ave., St. Louis 10, Mo. (2)  
 Berns Mfg. Corp., 3050 N. Rockwell St., Chicago, Ill. (2, 4, 5)  
 Bertram Co., Harvey P., 561-565 Reading Rd., Cincinnati 2, Ohio (3, 4)  
 Buffalo Forge Co., 490 Broadway, Buffalo 5, N. Y. (2, 3, 4, 5)  
 Carey Mfg. Co., Philp, Cincinnati 15, Ohio (4)  
 Century Fan & Ventilator Co., 45 Cedar St., Stamford, Conn. (3, 4)  
 Chelsea Fan and Blower Co., 639 South Ave., Plainfield, N. J. (1, 2, 3, 4, 5)  
 Chicago Blower Corp., 9867 Pacific Ave., Franklin Park, Ill. (1, 2, 3)  
 Commercialaire Inc., 300 Pacific St., Brooklyn 1, N. Y. (3, 4, 5)  
 Davidson Fan Co., 213 California St., Newton 58, Chicago 12, Ill. (1, 4, 5)  
 Dayton Electric Mfg. Co., 126 S. Oakley Blvd., Chicago 12, Ill. (1, 4, 5)  
 DeBothezat Fans Div., American Machine & Metals, Inc., East Moline, Ill. (3, 4, 5)  
 Diehl Mfg. Co., 1187 Findern Ave., Semerville, N. J. (1, 2, 3, 4, 5)  
 Dominion Electric Corp., 150 Elm St., Mansfield, Ohio (5)  
 Emerson Electric Mfg. Co., 8100 Florissant Ave., St. Louis 21, Mo. (1, 2, 3, 4, 5)  
 Folsom Co., Inc., 3104 Oak Lane, Dallas 10, Tex. (3, 4)  
 Frigid, Inc., 128-168 32nd St., Brooklyn 32, N. Y. (1, 2, 4, 5)  
 Garden City Fan Co., 332 S. Michigan Ave., Chicago 4, Ill. (2)  
 ● GRAYBAR ELECTRIC CO., INC., 420 Lexington Ave., N. Y. 17, N. Y. (1, 2, 3, 4, 5)—ADV. PG. 2  
 Guyan Machinery Co., Inc., Box 150, Logan, W. Va. (2)  
 Hamilton Fan & Blower Co., 2266 Bogen St., Cincinnati 14, Ohio (1, 2, 3, 4)  
 Hartzell Propeller Fan Co., S. Englert Ave., Piqua, Ohio (1, 2, 3, 4, 5)  
 Hirschman-Pohle Co., Inc., 300 Lent Ave., Le Roy, N. Y. (3)  
 Holland & Sons, Inc., J., 475 Keap St., Brooklyn 11, N. Y. (5)

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- INTAKE AND EXHAUST

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 International Engineering, Inc., P. O. Box 973, Dayton 1, Ohio (2, 3, 4, 5)  
 International Oil Burner Co., Fan Div., 3800 Park Ave., St. Louis 10, Mo. (1, 5)  
 Jenn Air Products Co., Inc., 333 N. Pennsylvania St., Indianapolis 4, Ind. (3, 4)  
 Kisco Co., Inc., 2414 De Kalb St., St. Louis 4, Mo. (5)  
 Lau Blower Co., 2001 Home Ave., Dayton 7, Ohio (4)  
 Markel Electric Products, Inc., 145 Seneca St., Buffalo 3, N. Y. (5)  
 Martin Fan & Blower Co., 4634 W. 21st Pl., Chicago 50, Ill. (3, 4, 5)  
 Marvin Mfg. Co., 648 Santa Fe Ave., Los Angeles 21, Calif. (3, 4)  
 McLarty Systems, 2600 Dickman Rd., Battle Creek, Mich. (4, 5)  
 McLean Engineering Laboratories, P. O. Box 531, Princeton, N. J. (4)  
 Meier Electric and Machine Co., Inc., 3525 E. Washington St., Indianapolis 7, Ind. (2, 4, 5)  
 Northern Blower Co., 6433 Barberton Ave., Cleveland 2, Ohio (2)  
 Peerless Electric Co., 1401 W. Market St., Warren, Ohio (1, 3, 4, 5)  
 Perfect-Line Mfg. Corp., Old Country Rd. & Railroad Ave., P. O. Box 65, Hicksville, L. I., N. Y. (4)  
 Phelps Fan Mfg. Co., 715 Thomas St., Little Rock, Ark. (4)  
 Phoenix Phan Div., Polaire Cooler Co., Inc., 112 S. 8th Ave., Phoenix, Ariz. (3, 4, 5)  
 Pryne & Co., Inc., 140 N. Towne Ave. (P. O. Box 698), Pomona, Calif. (4)  
 Quick Charge, Inc., 1730 N. E. 10th St., Oklahoma City 4, Okla. (1)  
 Reed Unit-Fans, Inc., 1001 St. Charles Ave., New Orleans, La. (4, 5)  
 Rich Fan Mfg. Co., Inc., Phil., 2900 Caroline, Houston 4, Texas (1, 2, 3, 4, 5)  
 Robbins & Myers, Inc., Fan Div., 387 S. Front St., Memphis, Tenn. (4)  
 Robbins & Myers, Inc., 1345 Lagonda Ave., Springfield, Ohio (1, 2, 3, 4, 5)  
 Robinson Ventilating Co., Zellenople, Pa. (1, 2, 4, 5)  
 Safety Car Heating and Lighting Co., Inc., P. O. Box 904, New Haven 4, Conn. (1, 4)  
 Standard Electric Mfg. Co., Inc., Haddon Ave., West Berlin, N. J. (2, 4, 5)  
 Star Expansion Bolt Co., 147 Cedar St., N. Y. 6, N. Y. (3)  
 Sterling Blower Co., 791 Windsor St., Hartford, Conn. (3)  
 Stewart Industries, Inc., 316 E. St. Joseph St., Indianapolis 2, Ind. (3, 4)  
 Sutton Corp., O. A., 1812 W. Second, Wichita, Kans. (5)  
 Torit Mfg. Co., 292 Walnut St., St. Paul 2, Minn. (1)



## PRODUCT DIRECTORY

Trade-Wind Motors, Inc., 7755 Paramount Blvd.,  
Riverside, Calif. (3, 4, 5)  
Trane Co., La Crosse, Wis. (1, 3, 4, 5)  
United Blower Co., Inc., 193 Centre St., N. Y. 13,  
N. Y. (1, 2, 3, 4, 5)  
Valley Fan Mfg. Co., Box 206, Fort Valley, Ga.  
(3, 4, 5)  
Westinghouse Electric Corp., P. O. Box 868, Pitts-  
burgh 30, Pa. (3, 4, 5)  
Westinghouse Electric Corp., Sturtevant Div., Damon  
St., Hyde Park, Boston 36, Mass. (2, 3)  
Wind-Way Fan & Ventilator Co., 531 St. Joseph  
St., New Orleans 12, La. (2, 3, 5)

### FANS, Exhaust, Residential

1. Attic
2. Wall
3. Window

Allen Cooler & Ventilator, Inc., 704 Woodward  
St., Rochester, Minn. (1)  
American Blower Corp., Detroit 32, Mich. (1, 2)  
American Cooler Corp., 3604 Mayflower St. (P. O.  
Box 2300), Jacksonville 3, Fla. (1, 2, 3)  
Ammerman Co., C. L., 110 N. 2nd St., Minneapolis,  
Minn. (1)  
Arex Co., 612 N. Michigan Ave., Chicago 11, Ill.  
(4)  
Argo Products Co., 1008 N. 22 St., St. Louis  
6, Mo. (1, 3)  
Artra Aluminum Foundry & Mfg. Co., 16 E. Ander-  
son St., St. Charles, Mo. (3)  
Atlas Tool & Mfg. Co., 5147 Natural Bridge Blvd.,  
St. Louis 15, Mo. (3)  
Baldor Electric Co., 4353 Duncan Ave., St. Louis  
10, Mo. (1, 2, 3)  
Berns Mfg. Corp., 3050 N. Rockwell St., Chicago,  
Ill. (1, 2, 3)  
Broan Mfg. Co., Inc., 1669 N. Water St., Mil-  
waukee 2, Wis. (2)  
Buffalo Forge Co., 490 Broadway, Buffalo 5,  
N. Y. (1, 2, 3)  
Carey Mfg. Co., Philip, Cincinnati 15, Ohio (1, 2)  
Chelsea Fan and Blower Co., 639 South Ave., Plain-  
field, N. J. (1, 2, 3)  
Chrom-Ever Co., 63 Kinkel St., Westbury, L. I.,  
N. Y. (1, 3)  
Commercialaire, Inc., 300 Pacific St., Brooklyn 1,  
N. Y. (1, 2, 3)  
Dana Fan & Blower Corp., 3501 Colerain Ave.,  
Cincinnati, Ohio (1)  
Dayton Electric Mfg. Co., 126 S. Oakley Blvd.,  
Chicago 12, Ill. (1, 2, 3)  
Diehl Mfg. Co., 1187 Finders Ave., Somerville,  
N. J. (1, 2, 3)  
Dominion Electric Corp., 150 Elm St., Mansfield,  
Ohio (3)  
Dura Steel Products Co., 1774 E. 21 St., Los  
Angeles 58, Calif. (1, 2)  
Emerson Electric Mfg. Co., 8100 Florissant Ave.,  
St. Louis 23, Mo. (1, 2, 3)  
Folsom Co., Inc., 3104 Oak Lane, Dallas 10,  
Tex. (1, 2, 3)  
Fresh-Air Div., Cary Corp., 221 N. LaSalle  
St., Chicago, Ill. (3)  
Frigid, Inc., 128-168 32nd St., Brooklyn 32,  
N. Y. (1, 2, 3)  
General Blower Co., 8610 Ferris Ave., Morton  
Grove, Ill. (2)  
General Electric Co., Small Appliance Div., 1285  
Boston Ave., Bridgeport 2, Conn. (2, 3)  
Hamilton Fan & Blower Co., 2266 Bogen St.,  
Cincinnati 14, Ohio (1, 2, 3)  
Hunter Fan & Ventilating Co., 400 S. Front St.,  
Memphis, Tenn. (1, 2, 3)  
Ilg Electric Ventilating Co., 2850 N. Pulaski Rd.,  
Chicago 41, Ill. (1, 2, 3)  
International Oil Burner Co., Fan Div., 3800 Park  
Ave., St. Louis 10, Mo. (1, 2, 3)  
Knapp-Monarch Co., Bent & Potomac, St. Louis  
16, Mo. (3)  
Kord Mfg. Co., Inc., 4510 White Plains Rd.,  
New York 70, N. Y. (3)  
Lau Blower Co., 2001 Home Ave., Dayton 7, Ohio  
(1, 2, 3)  
Le John Mfg. Co., Inc., 111 Twenty-Second St.,  
Huntington, W. Va. (3)  
Lomergan Mfg. Co., 704 Clark St., Albion, Mich.  
(1, 2, 3)  
Marcel Electric Products, Inc., 145 Seneca St.,  
Buffalo 3, N. Y. (3)  
Martin Fan & Blower Co., 4634 W. 21st Pl.,  
Chicago 50, Ill. (1, 2, 3)  
Marvin Mfg. Co., 648 Santa Fe Ave., Los Angeles  
21, Calif. (1, 2)  
McLarty Systems, 2600 Dickman Rd., Battle Creek,  
Mich. (2, 3)  
McLean Engineering Laboratories, P. O. Box 531,  
Princeton, N. J. (1)  
Meier Electric and Machine Co., Inc., 3525 E.  
Washington St., Indianapolis 7, Ind. (1, 2, 3)  
Mimar Products, Inc., 138 Spencer St., Brooklyn  
5, N. Y. (3)  
National Appliance Co., 4814 W. Vernor Highway,  
Detroit 9, Mich. (1, 2, 3)  
National Engineering & Mfg. Co., 16th & Lamine  
Sts., Sedalia, Mo. (3)  
National Gas Equipment Co., Inc., Denison, Texas  
(1, 3)  
NoTone, Inc., Madison & Red Bank Roads, Cin-  
cinnati 27, Ohio (2)  
Peerless Electric Co., 1401 W. Market St., War-  
ren, Ohio (1, 2, 3)  
Perfect-Line Mfg. Corp., Old Country Rd. & Rail-  
road Ave., P. O. Box 65, Hicksville, L. I.,  
N. Y. (1, 2)  
Pheps Fan Mfg. Co., 715 Thomas St., Little Rock,  
Ark. (1)

Phoenix Phan Div., Polaire Cooler Co., Inc., 112  
S. 8th Ave., Phoenix, Ariz. (1, 2)  
Progress Mfg. Co., Inc., Castor Ave. & Tulp St.,  
Phila. 34, Pa. (2)  
Pryne & Co., Inc., 140 N. Towne Ave. (P. O.  
Box 698), Pomona, Calif. (2)  
Reed Unit-Fans, Inc., 1001 St. Charles Ave., New  
Orleans, La. (1, 2, 3)  
Robbins & Myers, Inc., Fan Div., 387 S. Front St.,  
Memphis, Tenn. (1, 2, 3)  
Robbins & Myers, Inc., 1345 Lagonda Ave., Spring-  
field, Ohio (1, 2, 3)  
Simpson Co., 1060 E. 11 St., Oakland 6, Calif. (2)  
Standard Electric Mfg. Co., Inc., Haddon Ave.,  
West Berlin, N. J. (1, 2, 3)  
Stewart Industries, Inc., 316 E. St. Joseph St.,  
Indianapolis 2, Ind. (2)  
Sutton Corp., O. A., 1812 W. Second, Wichita,  
Kans. (3)  
Thermador Electrical Mfg. Co., 5119 District  
Blvd., Los Angeles 22, Calif. (1, 2, 3)  
Trade-Wind Motors, Inc., 7755 Paramount Blvd.,  
Riverside, Calif. (2, 3)  
United Blower Co., Inc., 193 Centre St., N. Y.  
13, N. Y. (1, 2, 3)  
Valley Fan Mfg. Co., Box 206, Fort Valley, Ga.  
(1, 2, 3)  
Viking Air Conditioning Div., National-U. S. Radi-  
ator Corp., 5601 Walworth Ave., Cleveland 2,  
Ohio (1, 3)  
Wal-h Co., W. W., 1010 Enquirer Bldg., Cincin-  
nati 2, Ohio (3)  
West Wind Corp., 1800 Airport Way, Seattle  
4, Wash. (2, 3)  
Westinghouse Electric Corp., Electric Appliance Div.,  
246 E. Fourth St., Mansfield, Ohio (2, 3)  
Westinghouse Electric Corp., P. O. Box 868, Pitts-  
burgh 30, Pa. (1, 2, 3)  
Wind-Way Fan & Ventilator Co., 531 St. Joseph  
St., New Orleans 12, La. (1, 3)

### FANS, Special Purpose

1. Chimney Flue
2. Furnace
3. Manhole Ventilating
4. Roof Ventilating

Aerofan Fan Co., Inc., Ash and Block Sts., Piqua,  
Ohio (1, 4)  
Air Controls, Inc., 2310 Superior Ave., Cleveland  
14, Ohio (2, 4, 5)  
Allen Cooler & Ventilator, Inc., 704 Woodward  
St., Rochester, Minn. (4)  
American Blower Corp., Detroit 32, Mich. (2, 4)  
Ammerman Co., C. L., 110 N. 2nd St., Minne-  
apolis, Minn. (4)  
Bertram Co., Harvey P., 561-565 Reading Rd.,  
Cincinnati 2, Ohio (4)  
Buffalo Forge Co., 490 Broadway, Buffalo 5, N. Y.  
(4)  
Century Fan & Ventilator Co., 45 Cedar St., Stam-  
ford, Conn. (4)  
Chelsea Fan and Blower Co., 639 South Ave., Plain-  
field, N. J. (4)  
Chicago Blower Corp., 9667 Pacific Ave., Franklin  
Park, Ill. (4)  
Coppus Engineering Corp., 344 Park Ave., Worces-  
ter 2, Mass. (3)  
Circulafare Div., Corlett-Turner Co., 1001 S. Kost-  
ner Ave., Chicago 24, Illinois (2)  
Davidson Fan Co., 213 California St., Newton  
58, Mass. (4)  
Dayton Electric Mfg. Co., 126 S. Oakley Blvd.,  
Chicago 12, Ill. (2)  
DeBothezat Fans Div., American Machine & Metals,  
Inc., East Moline, Ill. (1, 2, 4)  
Diehl Mfg. Co., 1187 Finders Ave., Somerville,  
N. J. (4)  
Frigid, Inc., 128-168 32nd St., Brooklyn 32,  
N. Y. (3)  
Garden City Fan Co., 332 S. Michigan Ave., Chicago  
4, Ill. (2)  
General Blower Co., 8610 Ferris Ave., Morton  
Grove, Ill. (3, 4)  
Hamilton Fan & Blower Co., 2266 Bogen St.,  
Cincinnati 14, Ohio (1, 2, 4)  
Hartzell Propeller Fan Co., S. Engle Ave., Piqua,  
Ohio (4)  
Hirschman-Pohle Co., Inc., 300 Lent Ave., Le Roy,  
N. Y. (4)  
Ilg Electric Ventilating Co., 2850 N. Pulaski Rd.,  
Chicago 41, Ill. (3, 4)  
International Engineering, Inc., P. O. Box 973,  
Dayton 1, Ohio (1, 3, 4)  
Iona Ventilator Co., Inc., 2821-29 W. Dauphin  
St., Phila. 32, Pa. (4)  
Jenn Air Products Co., Inc., 333 N. Pennsylvania  
St., Indianapolis 4, Ind. (4)  
Martin Fan & Blower Co., 4634 W. 21st Pl.,  
Chicago 50, Ill. (1, 2, 3, 4)  
McLarty Systems, 2600 Dickman Rd., Battle Creek,  
Mich. (2)  
Moore Co., P. O. Box 194, St. Louis 5, Mo. (4)  
National Appliance Co., 4814 W. Vernor Highway,  
Detroit 9, Mich. (4)  
Peerless Electric Co., 1401 W. Market St., War-  
ren, Ohio (4)  
Perfect-Line Mfg. Corp., Old Country Rd. & Rail-  
road Ave., P. O. Box 65, Hicksville, L. I.,  
N. Y. (1)  
Rich Fan Mfg. Co., Inc., Phil., 2900 Caroline,  
Houston 4, Texas (4)  
Standard Electric Mfg. Co., Inc., Haddon Ave.,  
West Berlin, N. J. (2)  
Star Expansion Bolt Co., 147 Cedar St., N. Y.  
6, N. Y. (1, 2, 4)  
Sterling Blower Co., 791 Windsor St., Hartford,  
Conn. (2)

Stewart Industries, Inc., 316 E. St. Joseph St.,  
Indianapolis 2, Ind. (4)  
Thermador Electrical Mfg. Co., 5119 District Blvd.,  
Los Angeles 22, Calif. (4)  
Trade-Wind Motors, Inc., 7755 Paramount Blvd.,  
Riverside, Calif. (4)  
Trane Co., La Crosse, Wis. (1, 3)  
United Blower Co., Inc., 193 Centre St., N. Y.  
13, N. Y. (3)  
United Electric Motor Co., 178 Centre St., N. Y.  
13, N. Y. (2, 3)  
Valley Fan Mfg. Co., Box 206, Fort Valley, Ga. (4)  
Viking Air Conditioning Div., National-U. S. Radi-  
ator Corp., 5601 Walworth Ave., Cleveland 2,  
Ohio (2)  
Westinghouse Electric Corp., Sturtevant Div., Damon  
St., Hyde Park, Boston 36, Mass. (4)  
Wind-Way Fan & Ventilator Co., 531 St. Joseph  
St., New Orleans 12, La. (3, 4)

### FASTENERS, Bolt, and Lacing

Armstrong-Bray & Co., 5366 Northwest Highway,  
Chicago 30, Ill.  
Chicago Rawhide Mfg. Co., 1301 Elston Ave.,  
Chicago 22, Ill.

### FASTENERS, Misc. See also STAPLERS; TOOLS, Powder Actuated

### FENCE, Electric

Copperweld Steel Co., Wire and Cable Div., Glass-  
port, Pa.  
International Electric Fence Co., Inc., 924 Albany  
St. (Box 252), Caldwell, Idaho  
Kaiser Aluminum & Chemical Sales, Inc., 919 N.  
Michigan Ave., Chicago 11, Ill.  
Parker McCrory Mfg. Co., 2609 Walnut St., Kan-  
sas City 8, Mo.  
Shox-Stok, Inc., Wellington, Ohio

### FENCING, Industrial Wire

Copperweld Steel Co., Wire and Cable Div., Glass-  
port, Pa.  
Page Steel & Wire Div., American Chain & Cable  
Co., Inc., First & River Sts., Monessen, Pa.

### FIBER, Vulcanized

Auburn Mfg. Co., Pease Ave. & Stack St., Middle-  
town, Conn.  
Continental-Diamond Fibre Co., Newark, Del.  
Excelsior Leather Washer Mfg. Co., Inc., 720  
Chestnut St., Rockford, Ill.  
Felt Products Mfg. Co., 1514 Carroll Ave., Chi-  
cago 7, Ill.  
Insulation and Wires, Inc., 3435 Chouteau Ave.,  
St. Louis 3, Mo.  
Mitchell Rand Insulation Co., 51 Murray St., N. Y.  
7, N. Y.  
Penn Fibre & Specialty Co., 2024 E. Westmoreland  
St., Phila. 34, Pa.  
Spaulding Fibre Co., Inc., 310 Wheeler St., Tona-  
wanda, N. Y.  
Taylor Fibre Co., Norristown, Pa.  
Wilmington Fibre Specialty Co., New Castle, Dela.

### FILES

Blackhawk Mfg. Co., 5325 W. Rogers, Milwaukee  
46, Wis.  
Chicago Pneumatic Tool Co., 6 E. 44 St., N. Y.  
17, N. Y.  
Disston & Sons, Inc., Henry, Unruh & Milnor Sts.,  
Tacony, Phila. 35, Pa.  
Nicholson File Co., 1078 Frankford Ave., Phila. 25,  
Pa.  
Tec Imports, 14525 Bessemer St., Van Nuys, Calif.

### FILTERS

1. Air Cleaning
2. Light or Color
3. Oil
4. Radio Interference

Aero Instrument Co., 112425 Vanowen St., North  
Hollywood, Calif. (4)  
Air & Refrigeration Corp., 439 Madison Ave., New  
York City, N. Y. (1)  
Air-Mare Corp., 25000 Miles Rd., Cleveland 28,  
Ohio (1, 3)  
Airmag Mfg. Co., 362 W. Erie St., Chicago 10,  
Ill. (1)  
American Wheelabrator & Equipment Corp., 895 S.  
Byrkit St., Mishawaka, Ind. (1)  
Atlantic Transformer Div., New London Instrument  
Co., Inc., 30 Hynes Ave., Groton, Conn. (4)  
Bower, Inc., 1362 E. Creighton Ave., Ft. Wayne 2,  
Ind. (3)  
Cornell-Dubilier Electric Corp., 333 Hamilton Blvd.,  
South Plainfield, N. J. (4)  
Corning Glass Works, Corning, N. Y. (2)  
Electro-Air Cleaner Co., 1285 Reedsdale St.,  
Pittsburgh 33, Pa. (1)  
Frigid, Inc., 128-168 32nd St., Brooklyn 32,  
N. Y. (1)  
Haertel Co., Walter, 2840 4th Ave. So., Min-  
neapolis, Minn. (1)  
Hallett Mfg. Co., 1601 W. Florence Ave., Ingle-  
wood, Calif. (4)  
Houdaille-Harshey of Indiana, Inc., Filtration Div.,  
435 Indianapolis Ave., Lebanon, Ind. (3)  
Knox Glass Inc., 2233 Palmer St., Swissvale, Pa.  
(2)  
Lancaster Lens Co., Lancaster, Ohio (2)  
Langwin Mfg. Corp., 37 W. 65 St., N. Y. 23,  
N. Y. (4)  
Lennox Furnace Co., Marshalltown, Iowa (1)

Macbeth Daylighting Corp., P. O. Box 950, Newburgh, N. Y. (2)  
 Micromold Radio Corp., 1087 Flushing Ave., Brooklyn 37, N. Y. (4)  
 Mine Safety Appliance Co., 201 N. Braddock Ave., Pittsburgh 8, Pa. (1)  
 Philco Corp., Tioga & C Sts., Phila. 34, Pa. (1)  
 Pyramid Electric Co., 1445 Hudson Blvd., North Bergen, N. J. (4)  
 Radex Corp., 2076 Elston Ave., Chicago 14, Ill. (1)  
 Sprague Electric Co., North Adams, Mass. (4)  
 Tobe Deutschmann Corp., Providence Highway, Norwood, Mass. (4)  
 Trion, Inc., 1000 Island Ave., McKees Rocks, Pa. (1)

**FINGERS, Controller**—see **CONTACTS, Controller**

**FIRE-FIGHTING EQUIPMENT**—see **EXTINGUISHERS, Fire**

# FITTINGS

1. Bus, Bar and Tubing
2. Fixture
3. Insulator
4. Pipe Structure
5. Surface Wiring
6. Wood Molding

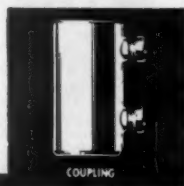
Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa. (1)  
 Anderson Brass Works, Inc., P. O. Drawer 2153, Birmingham 1, Ala. (1)  
 Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (2)  
 ● **BLACKBURN CORP., JASPER**, 35 Madison St., St. Louis 6, Mo. (1)—ADV. PG. 107  
 Bryant Electric Co., Box D Barnum Station, Bridgeport 2, Conn. (5, 6)  
 Centralab Div., Globe-Union Inc., 900 E. Keefe Ave., Milwaukee 1, Wis. (3)  
 Delta-Star Electric Div., H. K. Porter Co., Inc., 2437 Fulton St., Chicago 12, Ill. (1, 3, 4)  
 Dossert Mfg. Corp., 249-255 Huron St., Brooklyn 22, N. Y. (1)  
 Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa. (3)  
 Electrical Engineers Equipment Co., 25th Ave. & Division St., Melrose Park, Ill. (4)  
 Estes & Sons, E. B., 100 Fifth Ave., N. Y. 11, N. Y. (6)  
 Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (2, 3)  
 Howard Electric, 1700 N. Kostner Ave., Chicago 39, Ill. (5)  
 Hughes Bros., Inc., Seward, Neb. (6)  
 Keystone Mfg. Co., 23328 Sherwood Rd., Centerline, Detroit, Mich. (5)  
 Kondu Corp., 1040 W. 12 St., Erie, Pa. (2)

# Tube-weld

...a new concept  
 in electric  
 fitting design



Precision-made of one piece heavy gauge welded steel tubing with steel set screws staked for permanency! 1/2", 3/4" and 1" sizes. Lustrous Zinc finish and U.L. approved.



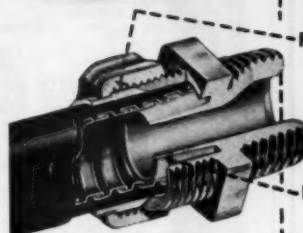
CONNECT WITH



FOR ECONOMY

# ELECTRIC TUBE PRODUCTS

A division of Berger Machine Products, Inc.  
 74-16 Grand Avenue, Maspeth (N.Y.C.), N. Y.  
 Defender 3-8000



# PLASTIC GRIPPING RING

- Seals out all moisture, oil, and corrosive fluids.
- Protects plastic conduit sheath against damage.
- Gives visual installed assurance of a proper ground.
- Color-coded for each conduit size.

# INTEGRAL TAPERED BODY WEDGE

- Positively grounds metal spiral inside conduit.
- Fits all thicknesses and convolutions in standard Liquid-Tight Flexible Metal Conduit.
- Grounding member integral with body.

Self-grounding . . . no complicated assemblies. Conduit slides straight into complete connector—no need to disassemble connector. Same wrench fits both body and gland nut. For conduit from 1/2" to 2". Straight connectors, 45° and 90° elbows available. Write for folder.

1323

# THE THOMAS & BETTS CO.

INCORPORATED

26 Butler Street, Elizabeth 1, New Jersey  
 Thomas & Betts Ltd., Montreal, P.Q., Canada

Memco Engineering & Mfg. Co., Inc., Commack, L. I., N. Y. (1)  
 Metalelectrics, Inc., 677 Broadway, N. Y. 12, N. Y. (2)  
 ● **MIDWEST ELECTRIC MFG. CO.**, 1639 Walnut St., Chicago 12, Ill. (2)—ADV. PG. 104-105  
 National Electric Products Corp., Gateway Center, 140 Stanwix St., Pittsburgh 22, Pa. (5)  
 ● **O. Z. ELECTRICAL MFG. CO., INC.**, 262 Bond St., Brooklyn 17, N. Y. (1)—ADV. PG. 136  
 Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (5, 6)  
 Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (1)  
 Porcelain Products, Inc., P. O. Box 300, Findlay, Ohio (3)  
 Powercraft Corp., 2215 De Kalb St., St. Louis 4, Mo. (1, 3, 4)  
 Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (5)  
 Richards Co., J. R., P. O. Box 482, Carnegie, Pa. (2)  
 Richards Mfg. Co., Ltd., 25 Rankin St., Newark 3, N. J. (1)  
 Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa. (1, 3)  
 Royal Electric Mfg. Co., 1122 E. 87 St., Chicago 19, Ill. (1, 3)  
 Rusgreen Mfg. Co., 14262 Birwood Ave., Detroit 38, Mich. (1)  
 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)  
 Southern Electrical Equipment Co., 308 W. Bland St., Charlotte 3, N. C. (1, 3, 4)  
 Square D Co., 6060 Rivard St., Detroit 11, Mich. (1)  
 Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa. (2, 4, 5)  
 Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (2, 3)  
 Taylor Fibre Co., Norristown, Pa. (3)  
 Thomas & Betts Co., Inc., 36 Butler St., Elizabeth, N. J. (1)  
 Thomas & Sons Co., R., Lisbon, Ohio (3)  
 Versabar Corp., 517 Communipaw Ave., Jersey City 6, N. J. (1, 2, 3)  
 Victor Insulators Div., I-T-E Circuit Breaker Co., Victor, N. Y. (3)  
 Webb Electric Mfg. Co., 1701 S. W. Jefferson St., Portland 1, Ore. (1)  
 Williams Products Co., H. E., 106 S. Main St., Carthage, Mo. (2)  
 Yorkville Metal Products Co., 677 Broadway, N. Y. 1, N. Y. (2)

# FITTINGS, Cable

1. Armored
2. Hazardous Location
3. Non-Metallic Sheathed

Adalet Mfg. Co., 14300 Lorain Ave., Cleveland 11, Ohio (1)  
 Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. (1, 2, 3)  
 ● **BLACKHAWK INDUSTRIES**, 250 S. Main St., Dubuque, Iowa (1, 3)—ADV. PG. 97  
 Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (1, 3)  
 Cam-Lok Div., Empire Products, Inc., 9051 Blue Ash Rd. (Box 98), Cincinnati 36, Ohio (3)  
 Denman Products Co., 210 Bietz Bldg., Ravenna, Ohio (3)  
 Duro Fittings Co., 2040 Santa Fe Ave., Los Angeles 21, Calif. (1, 3)  
 Electrical Fittings Corp., 37-50 57th St., Woodside 77, N. Y. (1, 3)  
 Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (1, 2, 3)  
 Hope Electrical Products Co., Inc., 338 Wilson Ave., Newark 5, N. J. (2)  
 M. & W. Electric Mfg. Co., Inc., S. Walnut St. (P. O. Box 87), East Palestine, Ohio (1)  
 Metalelectrics, Inc., 677 Broadway, N. Y. 12, N. Y. (1, 3)  
 ● **MIDWEST ELECTRIC MFG. CO.**, 1639 Walnut St., Chicago 12, Ill. (1, 3)—ADV. PG. 104-105  
 National Electric Products Corp., Gateway Center, 140 Stanwix St., Pittsburgh 22, Pa. (1, 3)  
 ● **O. Z. ELECTRICAL MFG. CO., INC.**, 262 Bond St., Brooklyn 17, N. Y. (1)—ADV. PG. 136  
 Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (2)  
 Rattan Mfg. Co., 10 Wall St. (P. O. Box 1745), New Haven 7, Conn. (1, 3)  
 Red Seal Electric Co., 6321 Detroit Ave., Cleveland 2, Ohio (1)  
 Richards Co., J. R., P. O. Box 482, Carnegie, Pa. (1, 3)  
 Rolter, Inc., Wm. G., 159 Liberty Ave., Mineola, N. Y. (1, 3)  
 Russell & Stoll Co., Inc., 125 Barclay St., New York 7, N. Y. (1, 2)  
 Spero Electric Corp., 20500 St. Clair Ave., Cleveland 17, Ohio (1)  
 Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa. (1, 3)  
 Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (1, 3)  
 Theplitt Mfg. Co., Gregg & Hammond Sts., Carnegie, Pa. (1, 3)  
 Thomas & Betts Co., Inc., 36 Butler St., Elizabeth, N. J. (1, 3)  
 Tomic Sales & Engineering Co., 20000 Sherwood Ave., Detroit 34, Mich. (3)  
 Versabar Corp., 517 Communipaw Ave., Jersey City 6, N. J. (1, 2, 3)  
 Wagner Malleable Products Co., 222 W. Adams St., Chicago 6, Ill. (1, 3)  
 Williams Products Co., H. E., 106 S. Main St., Carthage, Mo. (3)



## GEDNEY CONDUIT BODIES

*All types... all sizes  
easiest for wire pulling*

Threaded bodies for rigid conduit... No-Thread bodies for heavy rigid conduit... E.M.T. threadless bodies for thin wall conduit... F.S. types! Gedney brings you everything in conduit bodies and they're made of unbreakable malleable iron... heavy hot dip galvanized for longest life.

**Gedney Fittings FIT**

**GEDNEY**  
ELECTRIC COMPANY



RKO BLDG. • RADIO CITY • NEW YORK 20  
Foundry, Factory and Shipping Point,  
Terryville, Conn.

### FITTINGS, Conduit

1. EMT
2. Fiber
3. Flexible Metallic
4. Hazardous Location
5. Non-Metallic
6. Rigid, Threaded
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8. Vaporproof

Adalet Mfg. Co., 14300 Lorain Ave., Cleveland 11,  
Ohio (2, 4, 6, 8)  
Appleton Electric Co., 1701-59 Wellington Ave.,  
Chicago 13, Ill. (1, 3, 4, 5, 6)  
Arrolet Corp., Foot of Bower St., Montgomery, Pa.  
(6)

● **BLACKHAWK INDUSTRIES**, 250 S. Main St.,  
Dubuque, Iowa (1, 3, 5, 6)—ADV. PG. 97  
Briegleb Method Tool Co., 104 N. E. First St.,  
Galva, Ill. (1)  
Brown Company, 150 Causeway St., Boston, Mass.  
(2)

Cable Electric Products, Inc., 234 Daboll St.,  
Providence 7, R. I. (1, 6)  
Clifton Conduit Co., Inc., 75 Montgomery St., Jersey  
City 2, N. J. (1)  
Co-operative Industries, Inc., 100 Oakdale Rd.,  
Chester, N. J. (3)  
Conduit Nipple Mfg. Co., 1455 Spring Garden Ave.,  
Pittsburgh 12, Pa. (1, 6)

● **CROUSE-HINDS CO.**, Syracuse 1, N. Y. (1, 3, 4,  
6, 7, 8)—ADV. PG. 116-117  
Duro Fittings Co., 2040 Santa Fe Ave., Los Angeles  
21, Calif. (1, 2, 3, 5, 6, 7)  
Electric Tube Products, 74-16 Grand Ave., Maspeth,  
N. Y. (1)

Electrical Fittings Corp., 37-50 57th St., Wood-  
side 77, N. Y. (1, 3, 5, 6, 7)  
Elliott Electric Products Co., 1513 Olmstead Ave.,  
New York 62, N. Y. (6)

Gedney Electric Co., Americas Bldg., Radio City,  
N. Y. 20, N. Y. (1, 3, 4, 5, 6, 7, 8)  
General Steel Fittings Co., 1321 21st St., Racine,  
Wis. (1)  
Green, Inc., R. H., 1201 24th St., Oakland 7, Calif.  
(1)

Hope Electrical Products Co., Inc., 338 Wilson  
Ave., Newark 5, N. J. (4, 6, 8)  
Johnson Metal Hose, Inc., 10 Sperry St., Waterbury  
20, Conn. (3)

Killark Electric Mfg. Co., 3940 Easton Ave., St.  
Louis 13, Mo. (1, 4, 6, 7, 8)  
Kondis Corp., 1040 W. 12 St., Erie, Pa. (6, 7)  
Lew Electric Fittings Co., 627 W. Lake St., Chicago  
6, Ill. (1)

Libco Electric Products Co., Liberty St. & Worth,  
Central Falls, R. I. (7)  
Line Material Co., 700 W. Michigan St., Mil-  
waukee, Wis. (2)

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Metalectrics, Inc., 677 Broadway, N. Y. 12, N. Y.  
(1, 2, 3, 5, 6, 7)  
Midwest Electric Mfg. Co., 1639 Walnut St.,  
Chicago 12, Ill. (1, 3, 5, 6)  
National Electric Products Corp., Gateway Center,  
140 Starwix St., Pittsburgh 22, Pa. (1, 3, 5,  
6, 7)

Nelson Electric Mfg. Co., 217 N. Detroit Ave.,  
Tulsa 3, Okla. (4)

● **O. Z. ELECTRICAL MFG. CO., INC.**, 262 Bond St.  
Brooklyn 17, N. Y. (6, 7)—ADV. PG. 136  
Orangeburg Mfg. Co., Inc., Orangeburg, N. Y. (2)  
Pittsburgh Standard Conduit Co., 61 Bridge St.,  
Pittsburgh 23, Pa. (1, 6)

Pyle-National Co., 1344 N. Kostner Ave., Chicago  
31, Ill. (4, 6, 8)

Rab Electric Mfg. Co., Inc., 605 E. 132 St., New  
York 54, N. Y. (8)

Rattan Mfg. Co., 10 Wall St. (P. O. Box 1745),  
New Haven 7, Conn. (1, 3, 5, 6)

Richards Co., J. R., P. O. Box 482, Carnegie, Pa.  
(1, 2, 3, 5, 6)

Roller, Inc., Wm. G., 159 Liberty Ave., Mineola,  
N. Y. (1, 3, 5, 6)

Rusgreen Mfg. Co., 14262 Birwood Ave., Detroit  
38, Mich. (1)

● **RUSSELL & STOLL CO., INC.**, 125 Barclay St.,  
New York 7, N. Y.—ADV. PG. THIRD COVER  
Sierra Electric Corp., 15100 S. Figueroa, Gardena,  
Calif. (1)

Simplet Electric Co., 5136 Park Ave., Sycamore,  
Ill. (1, 6, 7, 8)

Steel City Electric Co., 1207 Columbus Ave., Pitts-  
burgh 33, Pa. (1, 3, 5, 6)

Steel Electric Products Co., Inc., 5602 18th Ave.,  
Brooklyn 4, N. Y. (1, 2, 3, 5, 6, 7)

Stonco Electric Products Co., 333 Monroe Ave.,  
Kenilworth, N. J. (8)

Taylor Fibre Co., Norristown, Pa. (2)

Techniflex Corp., 55 Jersey Ave., Port Jervis,  
N. Y. (3, 4, 8)

Thepitt Mfg. Co., Gregg & Hammond Sts., Carnegie,  
Pa. (1, 3, 5, 6)

Thomas & Betts Co., 36 Butler St., Elizabeth 1,  
N. J. (1, 3, 5, 6, 7)

Tomic Sales & Engineering Co., 20000 Sherwood  
Ave., Detroit 34, Mich. (1, 3)

Triangle Conduit & Cable Co., Inc., Triangle &  
Jersey Aves., New Brunswick, N. J. (6)

● **WAGNER MALLEABLE PRODUCTS CO.**, 222 W.  
Adams St., Chicago 6, Ill. (1)—ADV. PG. 146  
Williams Products Co., H. E., 106 S. Main St.,  
Carthage, Mo. (3, 6)  
Youngstown Sheet and Tube Co., Stambaugh Bldg.,  
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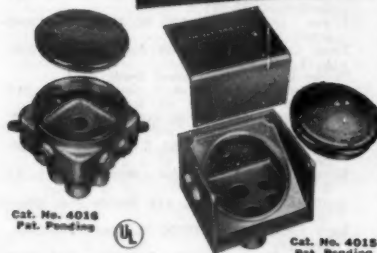
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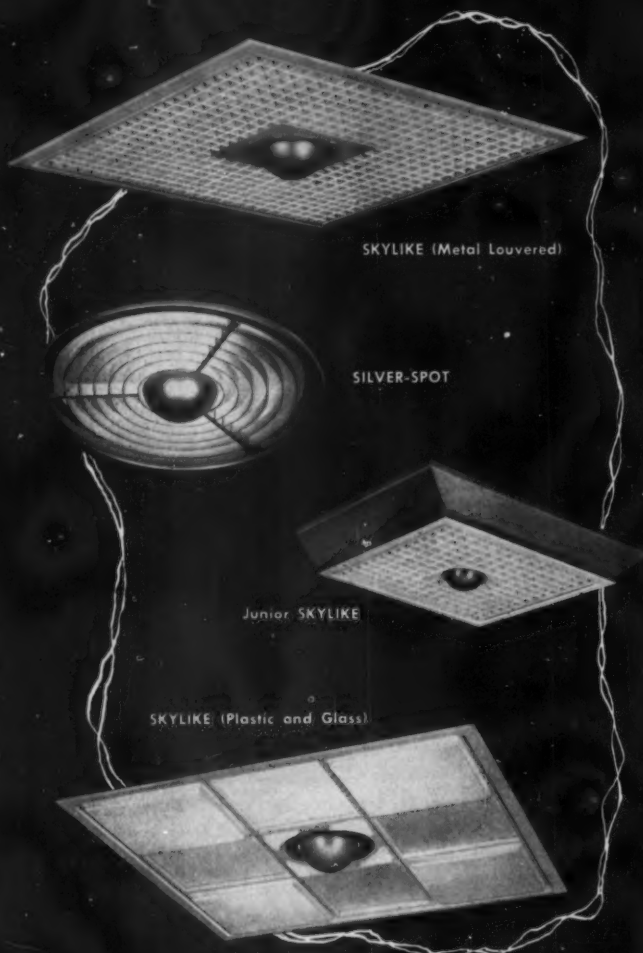
### FIXTURES, Lighting, Commercial

#### 1. Fluorescent 2. Incandescent

- Abrams Lighting, 3422 Market St., Phila. 4, Pa. (1)  
Admiral Corp., 3800 Cortland St., Chicago 47, Ill. (2)  
Afco Lite Corp., 1234 N. Paulina St., Chicago 22, Ill. (2)  
Ainsworth Lighting Inc., 38-10 Twenty-Ninth St., L. I. C. 1, N. Y. (1, 2)  
Alden Products Co., 117 N. Main St., Brockton, Mass. (1)  
Altko Mfg. Co., 4242 N. Lincoln Ave., Chicago 16, Ill. (1, 2)  
All-Brite Light Co., 845-847 Cherry St., Reading, Pa. (1)  
Amplex Corp., 111 Water St., Brooklyn 1, N. Y. (2)  
Appleton Electric Co., 1701-59 Willington Ave., Chicago 13, Ill. (2)  
Art Metal Co., 1814 E. 40 St., Cleveland 3, Ohio (2)  
Associated Lighting Service, 876 Kayne St., Redwood City, Calif. (1, 2)  
Atlas Electric Products Co., 319 Ten Eyck St., Brooklyn 6, N. Y. (1, 2)  
B M D & R Inc., 7020 Walker St., St. Louis Park, Minneapolis 16, Minn. (1, 2)  
Baker-Barkon Co., 1335 S. W. Morrison St., Portland, Ore. (1, 2)  
Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (1, 2)  
Caldwell & Co., Inc., Edward F., 101 Park Ave., N. Y. 17, N. Y. (1, 2)  
Canning-Pekara, Inc., 2144 N. Wood St., Chicago 14, Ill. (1)  
Capitol Hardware Mfg. Co., Inc., 400 N. Leavitt St., Chicago, Ill. (1)  
Catho-Lite Co., Inc., 3000 Ridgewood Ave., Baltimore 15, Md. (1)  
Celine, Inc., North Island Ave., Batavia, Ill. (1)  
Centralite Co., Inc., 1763 Central Ave., Cincinnati 14, Ohio (1)  
Century Lighting Inc., 521 W. 43 St., New York 36, N. Y. (1, 2)  
Circ-Light, Inc., 13 Cray Ave., Mount Vernon, N. Y. (1)  
Cole & Co., Inc., C. W., 320 E. 12 St., Los Angeles 15, Calif. (1, 2)  
Colonial Electric Products, Inc., 115 Market St., East Paterson, N. J. (1)  
Columbia Electric & Mfg. Co., North 2310 Fancher Way, Spokane, Wash. (1)  
Commercial Reflector & Mfg. Co., 3109 Maple Ave., Los Angeles 11, Calif. (1, 2)  
Compco Corp., 2251 W. St. Paul Ave., Chicago 47, Ill. (1, 2)  
Condi-Lite Corp., 889 Broadway, New York 3, N. Y. (1, 2)  
Cooper Hewitt Electric Co., 720-732 Grand St., Hoboken, N. J. (1)  
Crystal Mart, Inc., 31 E. 27 St., New York 16, N. Y. (2)  
Curtis Lighting Inc., 6135 W. 65 St., Chicago 38, Ill. (1, 2)  
● **DAY-BRITE LIGHTING, INC.**, 5411 Buhler Ave., St. Louis 7, Mo. (1, 2)—ADV. PG. 100-101  
Duray Fluorescent Mfg. Co., 3318 W. Montrose Ave., Chicago 18, Ill. (1)  
Duro-Test Corp., 2321 Hudson Blvd., North Bergen, N. J. (1, 2)  
Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (1, 2)  
Eagle Mfg. Co., 3508 Avalon Blvd., Los Angeles 11, Calif. (1, 2)  
Eastern Lighting Products Corp., 15 Somers St., Brooklyn 33, N. Y. (1, 2)  
Edison Electrical Co., 355 Weybosset St., Providence 3, R. I. (1)  
● **ELECTRO SILV-A-KING CORP.**, 1535 South Paulina St., Chicago 8, Ill. (1, 2)—ADV. PG. 120  
Electron Corp., Sheet Metal Div., 675 Rio Grande Ave., Littleton, Colo. (1)  
Elite Glass Co., Inc., 111 W. 22nd St., New York 11, N. Y. (2)  
Ender-Monarch Corp., 50 Sylvester St., Westbury, N. Y. (1, 2)  
Everglow Lighting Fixture Co., Inc., 433 Nepperhan Ave., Yonkers 3, N. Y. (1, 2)  
Felco Products, Inc., 166 Express St., Dallas 2, Tex. (1)  
● **FLEUR-O-LIER MFRS.**, 2116 Keith Bldg., Cleveland 15, Ohio (1)—ADV. PG. 119  
Fluores-O-Lite Co., Evans Terminal, North Broad St., Hillside 5, N. J. (1, 2)  
Frink Corp., 27-01 Bridge Plaza North, L. I. C., N. Y. (1, 2)  
Fullerton Mfg. Corp., Willard Rd., Norwalk, Conn. (1, 2)  
G & M Lighting Co., 4432 Olive St., St. Louis 8, Mo. (1, 2)  
Garden City Plating & Mfg. Co., 1750 N. Ashland Ave., Chicago 22, Ill. (1, 2)  
General Lighting Co., 240 McKibbin St., Brooklyn 6, N. Y. (1, 2)  
Gibson Mfg. Co., 1919 Piedmont Circle N. E., Atlanta, Ga. (1)  
Gil Glass and Fixture Co., Amber & Tioga Sts., Phila. 34, Pa. (1, 2)  
Globe Lighting Products, Inc., 1710 Flushing Ave., Brooklyn 37, N. Y. (1, 2)  
Good Mfg. Co., Inc., 618 W. Elm St., Chicago, Ill. (1)  
● **GRAYBAR ELECTRIC CO., INC.**, 420 Lexington Ave., N. Y. 17, N. Y. (1, 2)—ADV. PG. 2  
Great Northern Mfg. Corp., 1056 N. Wood St., Chicago 22, Ill. (1, 2)  
Gruber Bros., Inc., 125 S. 1 St., Brooklyn 11, N. Y. (1, 2)  
● **GUTH CO., EDWIN F.**, 2615 Washington Blvd., St. Louis 3, Mo. (1, 2)—ADV. PG. 129  
H. & H. Fixture Co., 1313 Walton Ave., St. Louis 13, Mo. (1)  
Hasco Electric Corp., 11 Cray Ave., Mount Vernon, N. Y. (1)  
Hershey Co., 1757 Sedgwick St., Chicago 14, Ill. (2)  
Holdenline Co., 2301 Scranton Rd., Cleveland 13, Ohio (1)  
● **HOLOPHANE CO., INC.**, 342 Madison Ave., New York 17, N. Y. (1, 2)—ADV. PG. 125  
House-O-Lite Corp., 2430 S. Ashland Ave., Chicago 7, Ill. (1, 2)  
Hub Electric Co., 2255 W. Grand Ave., Chicago 12, Ill. (2)  
Illuminating Engineering Co., 2347 East Nine Mile Rd., Hazel Park, Mich. (1)  
International Lighting Mfg. Co., 6511 Easton Ave., St. Louis 14, Mo. (1)  
Imperial Lighting Products, Latrobe, Pa. (2)  
Jackson Electrical Co., 900 W. Van Buren St., Chicago 7, Ill. (2)  
Jay Lighting Mfg. Co., Inc., 23-29 Quincy St., Brooklyn 5, N. Y. (2)  
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K-E Sales Corp., P. O. Box 2228 Gardner Station, St. Louis 9, Mo. (2)  
Kalsan Electric Co., 30 Mott St., Oceanside, L. I., N. Y. (1, 2)  
Kayline Co., 2480 E. 22 St., Cleveland 15, Ohio (1, 2)  
Kent Metal Mfg. Co., Inc., 490 Johnson Ave., Brooklyn 37, N. Y. (1, 2)  
Keystone Electric Mfg. Co., 2228 E. Tioga St., Phila 34, Pa. (1)  
Killark Electric Mfg. Co., 3940 Easton Ave., St. Louis 15, Mo. (2)  
Kirklin Co., 3435 E. Jefferson Ave., Detroit 7, Mich. (1, 2)  
Kilegl Bros. Universal Electric Stage Lighting Co., Inc., 321 W. 50 St., N. Y. 19, N. Y. (1, 2)  
Kilgilt Mfg. Co., 316 Delancey St., Phila. 6, Pa. (1)  
Kurtzon, Inc., Morris, 1420 S. Taiman Ave., Chicago 8, Ill. (1, 2)  
Lighting Products, Inc., Highland Park, Ill. (1)  
Lightmore Appliance Corp., 59 Throop Ave., Brooklyn 6, N. Y. (1)  
Lightolier, Inc., 346 Claremont Ave., Jersey City 5, N. J. (1, 2)  
Lighttron of Cornwall, 195 Hudson St., Cornwall-on-Hudson, N. Y. (1)  
Line Material Co., 700 West Michigan St., Milwaukee, Wis. (1, 2)  
Lite-Mor Electric Mfg. Corp., 527 Main St., Irwin, Pa. (1, 2)  
Litecontrol Corp., 36 Pleasant St., Watertown 72, Massachusetts (1, 2)

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Calif. (1)  
● LUMINOUS CEILINGS, INC., 2500 W. North Ave.,  
Chicago 47, Ill. (1)—ADV. PG. 131  
Luxor Lighting Products, Inc., 350 5th Ave.,  
New York 1, N. Y. (1)  
Marlou Lights, Inc., Fanwood, N. J. (1)  
Marvin Mfg. Co., 648 Santa Fe Ave., Los Angeles  
21, Calif. (1, 2)  
McPhillben Mfg. Co., Inc., 1329 Willoughby Ave.,  
Brooklyn 37, N. Y. (1, 2)  
Metalcraft Products Co., Inc., Mascher & Lippin-  
cott Sts., Phila. 33, Pa. (1)  
Mid-West Chandelier Co., 15th & Gentry (P. O.  
Box 7398), North Kansas City 16, Mo. (1)  
Miller Co., 99 Center St., Meriden, Conn. (1, 2)  
Miroflector Co., Inc., 148 19th St., Brooklyn 32,  
N. Y. (2)  
Mitchell Mfg. Co., 2525 Clyburn Ave., Chicago 14,  
Ill. (1)  
Modern Light Co., Inc., 7809 Maplewood Industrial  
Court, St. Louis 17, Mo. (1)  
Moe Light Div., Thomas Industries, Inc., 700 Oak  
St., Ft. Atkinson, Wis. (1, 2)  
● MULTI ELECTRIC MFG. INC., 4223 W. Lake St.,  
Chicago 24, Ill. (1, 2)—ADV. PG. 134  
Nemco Electric Co., 210 Second Ave., Seattle 4,  
Wash. (2)  
Neo-Ray Products Inc., 315 E. 22 St., N. Y. 10,  
N. Y. (1, 2)  
New York Fluorescent Mfg. Co., 162 Bowery, New  
York 12, N. Y. (1, 2)  
Northern Light Co., 1661 N. Water St., Milwaukee  
2, Wis. (1)  
Novelly Lighting Corp., 2480 E. 22 St., Cleveland  
15, Ohio (2)  
Overbagh & Ayres Mfg. Co., 411 S. Clinton St.,  
Chicago 7, Ill. (2)  
Paramount Industries Inc., G-1080 Bailenger Rd.,  
Flint 4, Mich. (1)  
Pass & Seymour Inc., Syracuse 9, N. Y. (2)  
Penn Fluorescent Light Mfg. Co. Wm., 1429-33 S.  
23 St., Phila. 46, Pa. (1)  
Perfect-Line Mfg. Corp., Old Country Rd. & Rail-  
road Ave., P. O. Box 65, Hicksville, L. I., N. Y.  
(2)  
Philadelphia Electric & Mfg. Co., 1200-36 N. 33  
St., Phila. 21, Pa. (1, 2)  
Prescolite Mfg. Corp., 2229 Fourth St., Berkeley  
10, Calif. (2)  
Pryne & Co., Inc., 140 N. Towne Ave. (P. O. Box  
698), Pomona, Calif. (2)  
Quaker City Electric Mfg. Co., 2810 E. Pacific St.,  
Phila. 34, Pa. (1)  
Rab Electric Mfg. Co., Inc., 605 E. 132 St.,  
New York 54, N. Y. (2)  
Rambusch Decorating Co., 40 W. 13 St., New York  
11, N. Y. (2)  
Reinhardt-McArthur Co., 2247 Gravois Ave., St.  
Louis 4, Mo. (1, 2)  
Revere Electric Mfg. Co., 6017 Broadway, Chicago  
40, Ill. (2)  
Ro-Son, Inc., 98 N. 7th St., Brooklyn 11, N. Y.  
(1, 2)  
Royaline Preferred Lighting Corp., 862 Newark  
Ave., Jersey City 6, N. J. (1)  
Ruby-Phillips Corp., 3202 Queens Blvd., L. I. C. 1,  
N. Y. (1, 2)  
● RUSSELL & STOLL CO., INC., 125 Barclay St.,  
New York 7, N. Y. (2)—ADV. PG. THIRD  
COVER  
S & M Lamp Co., 119 W. 36th Pl., Los Angeles 7,  
Calif. (2)  
Safety Car Heating and Lighting Co., Inc., P. O.  
Box 904, New Haven 4, Conn. (1)  
Segli Co., L. J., 2500 W. North Ave., Chicago 47,  
Ill. (1, 2)  
Shalda Mfg. Co., Inc., 156 W. Providencia Ave.,  
Burbank, Calif. (2)  
Silvray Lighting, Inc., 100 W. Main St., Bound  
Brook, N. J. (1, 2)  
Simes Co., Inc., 114 15th Ave., College Point,  
L. I., N. Y. (1, 2)  
Skylike Lighting, Inc., Bound Brook, N. J.  
Smithcraft Lighting Div., A. L. Smith Iron Co., 217  
Everett Ave., Chelsea 50, Mass. (1)  
Smoot-Holman Co., 321 N. Eucalyptus Ave. (P. O.  
Box 398), Inglewood, Calif. (1, 2)  
Solar Light Mfg. Co., 1357 S. Jefferson St., Chi-  
cago 7, Ill. (1, 2)  
Solux Corp., 58-17 28th Ave., Woodside 77, L. I.,  
N. Y. (1, 2)  
Southeast Lighting, Inc., 514 Atando Ave., Char-  
lotte 1, N. C. (1)  
Spero Electric Corp., 20500 St. Clair Ave., Cleve-  
land 17, Ohio (2)  
Stamford Metal Specialty Co., Inc., 429 West  
Broadway, N. Y. 12, N. Y. (1, 2)  
Standard Rite-Lite Co., 4206 West Ave., Ashtabula,  
Ohio (1)  
Stackpole Carbon Co., Tannery St., St. Marys, Pa.  
(2)  
Steber Mfg. Co., 2700 Roosevelt Rd., Broadview,  
Ill. (2)  
Stonco Electric Products Co., 333 Monroe Ave.,  
Kenilworth, N. J. (2)  
Sun-Lite Mfg. Co., 2555 Bellevue Ave., Detroit 7,  
Mich. (1, 2)  
Sunbeam Lighting Co., 777 E. 14th Pl., Los  
Angeles 21, Calif. (1, 2)  
Swedish Iron & Steel Corp., 100 Quimby St.,  
Westfield, N. J. (1)  
Swiveller Co., Inc., 43-34th St., Brooklyn 32, N. Y.  
(1, 2)  
Sylvania Electric Products, Inc., 1740 Broadway,  
N. Y. 19, N. Y. (1, 2)  
Tri-Part Mfg. Co., 934 Plum St., Detroit 1, Mich.  
(1)

Verd-A-Ray Corp., 615 Front St., Toledo 5, Ohio (1)  
 Versen Co., Kurt, Englewood, N. J. (2)  
 Virden Co., John C., 5009-6103 Longfellow Ave.,  
 Cleveland 3, Ohio (1, 2)  
 Wakefield Co., 731 S. Water St., Vermilion, Ohio  
 (1, 2)  
 Webb Electric Mfg. Co., 1701 S. W. Jefferson St.,  
 Portland 1, Ore. (2)  
 Westinghouse Electric Corp., P. O. Box 868, Pitts-  
 burgh 30, Pa. (1, 2)  
 Westinghouse Electric Corp., Lighting Div., 1216  
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 Ohio (1, 2)  
 ●WESTINGHOUSE ELECTRIC SUPPLY CO., 40 Wall  
 St., New York 5, N. Y. (1)—ADV. PG.  
 SECOND COVER  
 Wheeler Reflector Co., 275 Congress St., Boston  
 10, Mass. (1, 2)  
 White Co., O. C., 15-21 Hermon St., Worcester 8,  
 Mass. (1, 2)  
 Wiley, Inc., R. & W., Dearborn & Bridge St., Buf-  
 falo 7, N. Y. (1)  
 Williams Products Co., H. E., 106 S. Main St.,  
 Carthage, Mo. (1)  
 Wiremold Co., Hartford 10, Conn. (1)  
 Work-O-Lite Co., 522 Cortlandt St., Belleville 9,  
 N. Y. (1)

# **FIXTURES, Lighting, Hazardous Location**

1. Fluorescent
2. Incandescent

Abolite Lighting Div., Jones Metal Products Co.,  
 West Lafayette, Ohio (2)  
 Afco Lite Corp., 1234 N. Paulina St., Chicago 22,  
 Ill. (2)  
 Appleton Electric Co., 1701-59 Wellington Ave.,  
 Chicago 13, Ill. (1, 2)  
 Atlas Electric Products Co., 319 Ten Eyck St.,  
 Brooklyn 6, N. Y. (1, 2)  
 Benjamin Electric Mfg. Co., Northwest Highway &  
 Seegers Rd., Des Plaines, Ill. (1, 2)  
 Cole & Co., Inc., C. W., 320 E. 12 St., Los Angeles  
 15, Calif. (1, 2)  
 ●CROUSE-HINDS CO., Syracuse 1, N. Y. (1, 2)—  
 ADV. PG. 116-117  
 Edison Electrical Co., 355 Weybosset St., Providence  
 3, R. I. (1)  
 Electro Sil-A-King Corp., 1535 South Paulina St.,  
 Chicago 8, Ill. (1, 2)  
 Feld Corp., 1948-2002 Papin St., St. Louis 3,  
 Mo. (1)  
 Fluores-O-Lite Co., Evans Terminal, North Broad St.,  
 Hillside 5, N. J. (1, 2)  
 Garden City Plating & Mfg. Co., 1750 N. Ashland  
 Ave., Chicago 22, Ill. (2)  
 Great Northern Mfg. Corp., 1056 N. Wood St.,  
 Chicago 22, Ill. (1)  
 ●GUTH CO., EDWIN F., 2615 Washington Blvd., St.  
 Louis 3, Mo. (1, 2)—ADV. PG. 129  
 Holophane Co., Inc., 342 Madison Ave., New York  
 17, N. Y. (2)  
 House-O-Lite Corp., 2430 S. Ashland Ave., Chicago  
 7, Ill. (1, 2)  
 Jackson Electrical Co., 900 W. Van Buren St.,  
 Chicago 7, Ill. (2)  
 Kent Metal Mfg. Co., Inc., 490 Johnson Ave.,  
 Brooklyn 37, N. Y. (1, 2)  
 Killark Electric Mfg. Co., 3940 Easton Ave., St.  
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 Ave., P. O. Box 65, Hicksville, L. I., N. Y. (2)  
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 51, Ill. (2)  
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 40, Ill. (2)  
 Royalline Preferred Lighting Corp., 862 Newark Ave.,  
 Jersey City 6, N. J. (1)  
 Russell & Stoll Co., Inc., 125 Barclay St., New  
 York 7, N. Y. (2)  
 S & M Lamm Co., 119 W. 36th Pl., Los Angeles 7,  
 Calif. (2)  
 Simes Co., Inc., 114 15th Ave., College Point,  
 L. I., N. Y. (2)  
 Smoot-Holman Co., 321 N. Eucalyptus Ave. (P. O.  
 Box 398), Inglewood, Calif. (1, 2)  
 Stamford Metal Specialty Co., Inc., 429 West  
 Broadway, N. Y. 12, N. Y. (1, 2)  
 Sunbeam Lighting Co., 777 E. 14th Pl., Los An-  
 geles 21, Calif. (1)  
 Westinghouse Electric Corp., Lighting Div., 1216 W.  
 58th St. (P. O. Drawer 5817), Cleveland 1,  
 Ohio (1, 2)  
 Wheeler Reflector Co., 275 Congress St., Boston 10,  
 Mass. (1, 2)

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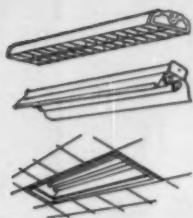
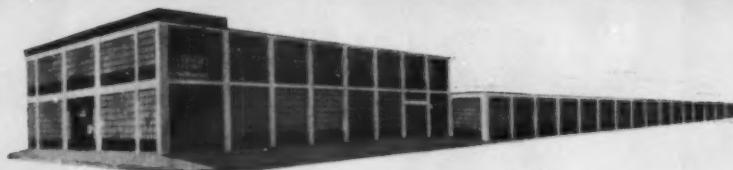
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 wood City, Calif. (2)  
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 Catho-Lite Co., Inc., 3000 Ridgewood Ave., Balti-  
 more 15, Md. (1)  
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 Centralite Co., Inc., 1763 Central Ave., Cincinnati  
 14, Ohio (1)  
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 Cole & Co., Inc., C. W., 320 E. 12 St., Los An-  
 geles 15, Calif. (1, 2)  
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 East Paterson, N. J. (1)  
 Columbia Electric & Mfg. Co., North 2310 Fancher  
 Way, Spokane, Wash. (1)  
 Commercial Reflector & Mfg. Co., 3109 Maple Ave.,  
 Los Angeles 11, Calif. (1, 2)  
 Compco Corp., 2251 W. St. Paul Ave., Chicago 47,  
 Ill. (1, 2)  
 Condi-Lite Corp., 889 Broadway, N. Y. 3, N. Y.  
 (1)  
 Cooper Hewitt Electric Co., 720-732 Grand St.,  
 Hoboken, N. J. (1)  
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 PG. 116-117  
 Curtis Lighting Inc., 6135 W. 65 St., Chicago 38,  
 Ill. (1, 2)  
 ●DAY-BRITE LIGHTING, INC., 5411 Bulwer Ave.,  
 St. Louis 7, Mo. (1)—ADV. PG. 100-101  
 Duray Fluorescent Mfg. Co., 3318 W. Montrose  
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Kent Metal Mfg. Co., Inc., 490 Johnson Ave., Brooklyn 37, N. Y. (1, 2)  
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Kileg Bros. Universal Electric Stage Lighting Co., Inc., 321 W. 50 St., N. Y. 19, N. Y. (1, 2)  
Kilgilt Mfg. Co., 316 Delancey St., Phila. 6, Pa. (1)  
Kurtzon, Inc., Morris, 1420 S. Talman Ave., Chicago 8, Ill. (1, 2)  
Lighting Products, Inc., 1549 Park Ave., West, Highland Park, Ill. (1)  
Lightmore Appliance Corp., 59 Throop Ave., Brooklyn 6, N. Y. (1)  
Lightoller, Inc., 346 Claremont Ave., Jersey City 5, N. J. (1, 2)  
Lightson of Cornwall, 195 Hudson St., Cornwall-On-Hudson, N. Y. (1)  
Lite-Mor Electric Mfg. Corp., 527 Main St., Irwin, Pa. (1, 2)  
Litecontrol Corp., 36 Pleasant St., Watertown 72, Massachusetts (1, 2)  
Litecraft Mfg. Corp., 8 E. 36 St., N. Y. 16, N. Y. (1, 2)  
• **LUMINOUS CEILINGS, INC.**, 2500 W. North Ave., Chicago 47, Ill. (1)—ADV. PG. 131  
Manning Co., R. A., 1810 North Ave., Sheboygan, Wis. (1, 2)  
Marlou Lights, Inc., Farwood, N. J. (1)  
Marvin Mfg. Co., 648 Santa Fe Ave., Los Angeles 21, Calif. (1, 2)  
McPhibben Mfg. Co., Inc., 1329 Willoughby Ave., Brooklyn 37, N. Y. (1, 2)  
Meier-John-Wengler, 1102 W. 9th St., Cincinnati 3, Ohio (1, 2)  
Metacraft Products Co., Inc., Masher & Lippincott Sts., Phila. 33, Pa. (1)  
Miller Co., 99 Center St., Meriden, Conn. (1, 2)  
Miroflecto Co., Inc., 148 19th St., Brooklyn 32, N. Y. (2)  
Mitchell Mfg. Co., 2525 Clybourn Ave., Chicago 14, Ill. (1)  
Modern Light Co., Inc., 7809 Maplewood Industrial Court, St. Louis 17, Mo. (1)  
• **MULTI ELECTRIC MFG. INC.**, 4223 W. Lake St., Chicago 24, Ill. (1, 2)—ADV. PG. 134  
Nemco Electric Co., 210 Second Ave., Seattle 4, Wash. (2)  
Neo-Ray Products Inc., 315 E. 22 St., N. Y. 10, N. Y. (1, 2)  
New York Fluorescent Mfg. Co., 162 Bowery, New York 12, N. Y. (1, 2)  
Northern Light Co., 1661 N. Water St., Milwaukee 2, Wis. (1)  
Novelty Lighting Corp., 2480 E. 22 St., Cleveland 15, Ohio (2)  
Overbagh & Ayres Mfg. Co., 411 S. Clinton St., Chicago 7, Ill. (2)  
Pass & Seymour, Inc., Syracuse 9, N. Y. (2)  
Penn Fluorescent Light Mfg. Co., Wm., 1429-33 S. 23 St., Phila. 46, Pa. (1)  
Perfect-Line Mfg. Corp., Old Country Rd. & Railroad Ave., P. O. Box 65, Hicksville, L. I., N. Y. (2)  
Philadelphia Electrical & Mfg. Co., 1200-36 N. 31 St., Phila. 21, Pa. (1)  
Pittsburgh Reflector Co., Oliver Bldg., Pittsburgh 22, Pa. (1, 2)  
Prescolite Mfg. Corp., 2229 Fourth St., Berkeley 10, Calif. (2)  
Pyrrne & Co., Inc., 140 N. Towne Ave. (P. O. Box 698), Pomona, Calif. (2)  
Quaker City Electric Mfg. Co., 2810 E. Pacific St., Phila. 34, Pa. (1)  
Rab Electric Mfg. Co., Inc., 605 E. 132 St., New York 64, N. Y. (2)  
• **RAMBUSCH DECORATING CO.**, 40 W. 13 St., New York 11, N. Y. (2)—ADV. PG. 141  
Reinhardt-McArthur Co., 2247 Gravius Ave., St. Louis 4, Mo. (1, 2)  
Revere Electric Mfg. Co., 6017 Broadway, Chicago 40, Ill. (2)  
Ro-Son, Inc., 98 N. 7th St., Brooklyn 11, N. Y. (1)  
Royalline Preferred Lighting Corp., 862 Newark Ave., Jersey City 6, N. J. (1)  
Ruby-Philite Corp., 32-02 Queens Blvd., L. I. C. 1, N. Y. (1, 2)  
• **RUSSELL & STOLL CO., INC.**, 125 Barclay St., New York 7, N. Y. (2)—ADV. PG. THIRD COVER  
S & M Lamp Co., 119 W. 36th Pl., Los Angeles 7, Calif. (2)  
Safety Car Heating and Lighting Co., Inc., P. O. Box 904, New Haven 4, Conn. (1)  
Segil Co., L. J., 2500 W. North Ave., Chicago 47, Ill. (1, 2)  
Silvray Lighting, Inc., 100 W. Main St., Bound Brook, N. J. (1, 2)  
Simes Co., Inc., 114 15th Ave., College Point, L. I., N. Y. (1, 2)  
Smoot-Holman Co., 321 N. Euclid Ave. (P. O. Box 398), Inglewood, Calif. (1, 2)  
Solar Light Mfg. Co., 1357 S. Jefferson St., Chicago 7, Ill. (1, 2)  
Solux Corp., 58-17 28th Ave., Woodside 77, L. I., N. Y. (1, 2)

- Stamford Lighting, 429 W. Broadway, New York 12, N. Y. (1, 2)  
Steber Mfg. Co., 2700 Roosevelt Rd., Broadview, Ill. (2)  
Stenberg Mfg. Co., 4510 Addison St., Chicago 41, Ill. (2)  
Stocker & Yale, Inc., Green St., Marblehead, Mass. (1)  
Stonco Electric Products Co., 333 Monroe Ave., Kenilworth, N. J. (2)  
Sun-Lite Mfg. Co., 2555 Bellevue Ave., Detroit 7, Mich. (1, 2)  
Sunbeam Lighting Co., 777 E. 14th Pl., Los Angeles 21, Calif. (1, 2)  
Swedish Iron & Steel Corp., 100 Quimby St., Westfield, N. J. (1)  
Swivelor Co., Inc., 43-34th St., Brooklyn 32, N. Y. (1, 2)  
Sylvania Electric Products, Inc., 1740 Broadway, N. Y. 19, N. Y. (1)  
Tri-Part Mfg. Co., 934 Plum St., Detroit 1, Mich. (1)  
Unity Mfg. Co., 2909 S. Indiana Ave., Chicago 16, Ill. (2)  
Verd-A-Ray Corp., 615 Front St., Toledo 5, Ohio (1)  
Versen Co., Kurt, Englewood, N. J. (2)  
Virden Co., John C., 5009-6103 Longfellow Ave., Cleveland 3, Ohio (1, 2)  
Votst Co., 1636 N. Carlisle St., Phila. 21, Pa. (1, 2)  
Wakefield Co., 731 S. Water St., Vermilion, Ohio (1, 2)  
Webb Electric Co., 1701 S. W. Jefferson St., Portland 1, Ore. (2)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2)  
Westinghouse Electric Corp., Lighting Div., 1216 W. 58th St. (P. O. Drawer 5817), Cleveland 1, Ohio (1, 2)  
Westinghouse Electric Supply Co., 40 Wall St., New York 5, N. Y. (1)  
Wheeler Reflector Co., 275 Congress St., Boston 10, Mass. (1, 2)  
White Co., O. C., 15-21 Hermon St., Worcester 8, Mass. (1, 2)  
Wiley, Inc., R. & W., Dearborn & Bridge St., Buffalo 7, N. Y. (1)  
Williams Products Co., H. E., 106 S. Main St., Carthage, Mo. (1)  
Work-O-Lite Co., 522 Cortland St., Belleville 9, N. Y. (1)

### FIXTURES, Lighting, Ornamental

1. Exterior
2. Interior

- Aerolux Lights Corp., 653 11th Ave., New York 36, N. Y. (1, 2)  
Afco Lite Corp., 1234 N. Paulina St., Chicago 22, Ill. (1)  
Alfco Mfg. Co., 4242 N. Lincoln Ave., Chicago 18, Ill. (2)  
Associated Lighting Service, 876 Kaymyn St., Redwood City, Calif. (1, 2)  
B M D & R Inc., 7020 Walker St., St. Louis Park, Minneapolis 16, Minn. (1, 2)  
Baker-Barkon Co., 1335 S. W. Morrison St., Portland, Ore. (1, 2)  
Caldwell & Co., Inc., Edward F., 101 Park Ave., N. Y. 17, N. Y. (1, 2)  
Cole & Co., Inc., C. W., 320 E. 12 St., Los Angeles 15, Calif. (1, 2)  
Colonial Electric Products, Inc., 1-115 Market St., East Paterson, N. J. (1, 2)  
Columbia Electric & Mfg. Co., North 2310 Fancher Way, Spokane, Wash. (1, 2)  
Compco Corp., 2251 W. St. Paul Ave., Chicago 47, Ill. (1, 2)  
Crystal Mart, Inc., 31 E. 27 St., New York 16, N. Y. (2)  
Curtis Lighting Inc., 6135 W. 65 St., Chicago 38, Ill. (2)  
Duray Fluorescent Mfg. Co., 3318 W. Montrose Ave., Chicago 18, Ill. (2)  
Eagle Mfg. Co., 3508 Avalon Blvd., Los Angeles 11, Calif. (1, 2)  
Elite Glass Co., Inc., 111 W. 22nd St., New York 11, N. Y. (2)  
Everglow Lighting Fixture Co., Inc., 433 Nepperhan Ave., Yonkers 3, N. Y. (1, 2)  
Feld Corp., 1948-2002 Papin St., St. Louis 3, Mo. (1, 2)  
Fenton Brewer, Inc., 225 Fifth Ave., N. Y. 10, N. Y. (2)  
Fluorescent Equipment & Mfg. Co., 5105 Cowan Ave., Cleveland 27, Ohio (2)  
Frink Corp., 27-01 Bridge Plaza North, L. I. C., N. Y. (1, 2)  
General Lighting Co., 248 McKibbin St., Brooklyn 6, N. Y. (2)  
Geringer & Sons Mfg. Corp., Peekskill, N. Y. (2)  
Gill Glass and Fixture Co., Amber & Toga Sts., Phila. 34, Pa. (2)  
Globe Lighting Products, Inc., 1710 Flushing Ave., Brooklyn 37, N. Y. (1, 2)  
Good Mfg. Co., Inc., 618 W. Elm St., Chicago, Ill. (2)  
Great Northern Mfg. Corp., 1056 N. Wood St., Chicago 22, Ill. (1, 2)  
Gross Chandler Co., 2036 Delmar Blvd., St. Louis 3, Mo. (1, 2)  
Gruber Bros., Inc., 125 S. 1 St., Brooklyn 11, N. Y. (1, 2)  
• **GUTH CO., EDWIN F.**, 2615 Washington Blvd., St. Louis 3, Mo. (1, 2)—ADV. PG. 129  
Hacdo Aluminum Products Co., 501 Pressley St., Pittsburgh 12, Pa. (1, 2)



Hervig Co., 1757 Sedgwick St., Chicago 14, Ill. (1, 2)  
 Imperial Lighting Products, Latrobe, Pa. (1, 2)  
 International Lighting Mfg. Co., 6511 Easton Ave., St. Louis 14, Mo. (2)  
 Jackson Electrical Co., 900 W. Van Buren St., Chicago 7, Ill. (1)  
 Kalsan Electric Co., 30 Mott St., Oceanside, L. I., N. Y. (1, 2)  
 Kent Metal Mfg. Co. Inc., 490 Johnson Ave., Brooklyn 37, N. Y. (1, 2)  
 Killark Electric Mfg. Co., 3940 Easton Ave., St. Louis 13, Mo. (1, 2)  
 Kurtzon, Inc., Morris, 1420 S. Talman Ave., Chicago 8, Ill. (1, 2)  
 Leader Lamp Mfg. Co., 476 Broome St., N. Y. 13, N. Y. (1, 2)  
 Lighting Products, Inc., 1549 Park Ave. West, Highland Park, Ill. (2)  
 Lightolier, Inc., 346 Claremont Ave., Jersey City 5, N. J. (1, 2)  
 Line Material Co., 700 West Michigan St., Milwaukee, Wis. (1)  
 Litecraft Mfg. Corp., 8 E. 36 St., N. Y. 16, N. Y. (1, 2)  
 Luminous Ceilings, Inc., 2500 W. North Ave., Chicago 47, Ill. (2)  
 Magni Flood Inc., 38 N. Second Ave., Mt. Vernon, N. Y. (1)  
 Manning Co., R. A., 1810 North Ave., Sheboygan, Wis. (1, 2)  
 Markel Electric Products, Inc., 145 Seneca St., Buffalo 3, N. Y. (1, 2)  
 Marlow Lights, Inc., Fannwood, N. J. (2)  
 Marvin Mfg. Co., 648 Santa Fe Ave., Los Angeles 21, Calif. (1)  
 Meterjohan-Wengler, 1102 W. 9 St., Cincinnati 3, Ohio (1, 2)  
 Mesa Metal Works, P. O. Box 294, Chatham, N. J. (1)  
 Miroflector Co., Inc., 148 19th St., Brooklyn 32, N. Y. (1, 2)  
 Moe Light Div., Thomas Industries, Inc., 700 Oak St., Ft. Atkinson, Wis. (1, 2)  
 Nemco Electric Co., 210 Second Ave., Seattle 4, Wash. (1, 2)  
 Nepe Mfg. Co., 6025 N. Keystone Ave., Chicago 30, Ill. (1)  
 Novelty Lighting Corp., 2480 E. 22 St., Cleveland 15, Ohio (1, 2)  
 Philadelphia Electrical & Mfg. Co., 1200-36 N. 31 St., Phila. 21, Pa. (1)  
 Prescolite Mfg. Corp., 2229 Fourth St., Berkeley 10, Calif. (1, 2)  
 Rab Electric Mfg. Co., Inc., 605 E. 132 St., New York 54, N. Y. (1)  
 ● **RAMBUSCH DECORATING CO., 40 W. 13 St., New York 11, N. Y. (1, 2)—ADV. PG. 141**  
 Reinhardt-McArthur Co., 2247 Gravois Ave., St. Louis 4, Mo. (1, 2)  
 Revere Electric Mfg. Co., 6017 Broadway, Chicago 40, Ill. (1)  
 Ro-Son, Inc., 98 N. 7th St., Brooklyn 11, N. Y. (1, 2)  
 Segil Co., L. J., 2500 W. North Ave., Chicago 47, Ill. (2)  
 Shalda Mfg. Co., Inc., 156 W. Providencia Ave., Burbank, Calif. (1)  
 Simes Co. Inc., 14 15th Ave., College Point, L. I., N. Y. (1)  
 Solar Light Mfg. Co., 1357 S. Jefferson St., Chicago 7, Ill. (1, 2)  
 Stamford Lighting, 429 W. Broadway, New York 12, N. Y. (2)  
 Steber Mfg. Co., 2700 Roosevelt Rd., Broadview, Ill. (1)  
 Sternberg Mfg. Co., 4510 Addison St., Chicago 41, Ill. (1, 2)  
 Stonco Electric Products Co., 333 Monroe Ave., Kenilworth, N. J. (1)  
 Swiveller Co., Inc., 43-34th St., Brooklyn 32, N. Y. (1, 2)  
 Versen Co., Kurt, Englewood, N. J. (2)  
 Virden Co., John C., 5009-6103 Longfellow Ave., Cleveland 3, Ohio (1, 2)  
 Volant Co., 1636 N. Carlisle St., Phila. 21, Pa. (1, 2)  
 Webb Electric Mfg. Co., 1701 S. W. Jefferson St., Portland 1, Ore. (1, 2)  
 Weiss and Biheller Merchandise Corp., 584 Broadway, N. Y. 12, N. Y. (1, 2)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2)

# **FIXTURES, Lighting, Residential**

## **1. Exterior 2. Interior**

Abolite Lighting Div., Jones Metal Products Co., West Lafayette, Ohio (1, 2)  
 Adjusta Post Mfg. Co., 908 St. Clair St., Akron 7, Ohio (1)  
 Admiral Corp., 3800 Cortland St., Chicago 47, Ill. (1, 2)  
 Aerolux Lights Corp., 653 11th Ave., New York 36, N. Y. (1, 2)  
 Alco Lite Corp., 1234 N. Paulina St., Chicago 22, Ill. (1)  
 Altko Mfg. Co., 4242 N. Lincoln Ave., Chicago 18, Ill. (1, 2)  
 All-Brite Light Co., 845-847 Cherry St., Reading, Pa. (2)  
 Amplex Corp., 111 Water St., Brooklyn 1, N. Y. (2)

Art Metal Co., 1814 E. 40 St., Cleveland 3, Ohio (1, 2)  
 Associated Lighting Service, 876 Kaynne St., Redwood City, Calif. (1, 2)  
 Atlas Electric Products Co., 319 Ten Eyck St., Brooklyn 6, N. Y. (1, 2)  
 Baker-Barkon Co., 1335 S. W. Morrison St., Portland, Ore. (1, 2)  
 Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (1, 2)  
 Betterlite Mfg. Co., 1922 S. Santa Fe Ave., Los Angeles 21, Calif. (1, 2)  
 Black Mfg. Co., 300-08 N. Third St., Phila. 6, Pa. (1)  
 Caldwell & Co., Inc., Edward F., 101 Park Ave., N. Y. 17, N. Y. (1, 2)  
 Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (2)  
 Cole & Co., Inc., C. W., 320 E. 12 St., Los Angeles, Calif. (1, 2)  
 Commercial Reflector & Mfg. Co., 3109 Maple Ave., Los Angeles 11, Calif. (2)  
 Compco Corp., 2251 W. St. Paul Ave., Chicago 47, Ill. (1, 2)  
 Crystal Mart, Inc., 31 E. 27 St., New York 16, N. Y. (2)  
 Curtis Development & Mfg. Co., 3244 N. 33 St., Milwaukee 16, Wis. (1)  
 Duray Fluorescent Mfg. Co., 3318 W. Montrose Ave., Chicago 18, Ill. (2)  
 Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (1, 2)  
 Eagle Mfg. Co., 3508 Avalon Blvd., Los Angeles 11, Calif. (1, 2)  
 Elite Glass Co., Inc., 111 W. 22nd St., New York 11, N. Y. (2)  
 Ender-Monarch Corp., 50 Sylvester St., Westbury, N. Y. (2)  
 Esty Mfg. Co., 1231 W. Monroe St., Chicago 7, Ill. (1, 2)  
 Everglow Lighting Fixture Co., Inc., 433 Nepperhan Ave., Yonkers 3, N. Y. (1, 2)  
 Fenton Brewer, Inc., 225 Fifth Ave., N. Y. 10, N. Y. (2)  
 Fluores-O-Lite Co., Evans Terminal, North Broad St., Hillside 5, N. J. (1)  
 Fluorescent Equipment & Mfg. Co., 5105 Cowan Ave., Cleveland 27, Ohio (2)  
 G & M Lighting Co., 4432 Olive St., St. Louis 8, Mo. (2)  
 General Lighting Co., 248 McKibbin St., Brooklyn 6, N. Y. (2)  
 Geringer & Sons Mfg. Corp., Peekskill, N. Y. (2)  
 Gill Glass and Fixture Co., Amber & Tioga Sts., Phila. 34, Pa. (2)  
 Glatthar Lighting Co., 949 E. 72 St., Cleveland 3, Ohio (1, 2)  
 Globe Lighting Products, Inc., 1710 Flushing Ave., Brooklyn 37, N. Y. (1, 2)  
 Great Northern Mfg. Corp., 1056 N. Wood St., Chicago 22, Ill. (1, 2)  
 Gross Chandelier Co., 2036 Delmar Blvd., St. Louis 3, Mo. (1, 2)  
 H. & H. Fixture Co., 1313 Walton Ave., St. Louis 13, Mo. (2)  
 Hadco Aluminum Products Co., 501 Pressley St., Pittsburgh 12, Pa. (1, 2)  
 Hasco Electric Corp., 11 Crarry Ave., Mount Vernon, N. Y. (2)  
 Holophone Co., Inc., 342 Madison Ave., New York 17, N. Y. (1, 2)  
 House-O-Lite Corp., 2430 S. Ashland Ave., Chicago 7, Ill. (2)  
 Imperial Lighting Products, Latrobe, Pa. (1, 2)  
 Independent Protection Co., Inc., 1605-07 S. Main St., Goshen, Ind. (1)  
 International Lighting Mfg. Co., 6511 Easton Ave., St. Louis 14, Mo. (2)  
 Jackson Electrical Co., 900 W. Van Buren St., Chicago 7, Ill. (1)  
 Jay Lighting Mfg. Co., Inc., 23-29 Quincy St., Brooklyn 5, N. Y. (2)  
 Kalsan Electric Co., 30 Mott St., Oceanside, L. I., N. Y. (1, 2)  
 Kent Metal Mfg. Co. Inc., 490 Johnson Ave., Brooklyn 37, N. Y. (1, 2)  
 Kirlin Co., 3435 E. Jefferson Ave., Detroit 7, Mich. (1, 2)  
 Kiegl Bros. Universal Electric Stage Lighting Co., Inc., 321 W. 30 St., N. Y. 19, N. Y. (2)  
 Kilgilt Mfg. Co., 316 Delancy St., Phila. 6, Pa. (2)  
 Leader Lamp Mfg. Co., 476 Broome St., N. Y. 13, N. Y. (1, 2)  
 Lightolier, Inc., 346 Claremont Ave., Jersey City 5, N. J. (1, 2)  
 Line Material Co., 700 West Michigan St., Milwaukee, Wis. (1)  
 Lite-Mor Electric Mfg. Corp., 527 Main St., Irwin, Pa. (1, 2)  
 Litecraft Mfg. Corp., 8 E. 36 St., N. Y. 16, N. Y. (1, 2)  
 ● **LUMINOUS CEILINGS, INC., 2500 W. North Ave., Chicago 47, Ill. (2)—ADV. PG. 131**  
 Magni Flood Inc., 38 N. Second Ave., Mt. Vernon, N. Y. (1)  
 Markel Electric Products, Inc., 145 Seneca St., Buffalo 3, N. Y. (1, 2)  
 Marks Mfg. Co., 700 N. Carpenter St., Chicago 22, Ill. (1, 2)  
 Marvin Mfg. Co., 648 Santa Fe Ave., Los Angeles 21, Calif. (1, 2)  
 Mesa Metal Works, P. O. Box 294, Chatham, N. J. (1)  
 Miroflector Co., Inc., 148 19th St., Brooklyn 32, N. Y. (1, 2)

## **Distinctive Residential LIGHTING**



No. J-559 - 6Lts.  
CANDELABRA  
SOCKETS

Width 16"  
Min. Length 18"  
Max. Length 46"

from the

**JAY**  
**LIGHTING COLLECTION**

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**JAY LIGHTING MFG. CO. INC.**

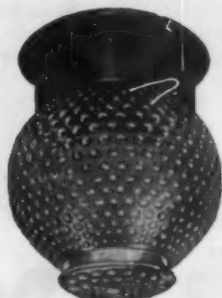
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25 Quincy St., Brooklyn 38, N. Y.

Moe Light Div., Thomas Industries, Inc., 700 Oak St., Ft. Atkinson, Wis. (1, 2)  
 Nemco Electric Co., 210 Second Ave., Seattle 4, Wash. (1, 2)  
 Neo-Ray Products Inc., 315 E. 22 St., N. Y. 10, N. Y. (2)  
 New York Fluorescent Mfg. Co., 162 Bowery, New York 12, N. Y. (2)  
 Novelty Lighting Corp., 2480 E. 22 St., Cleveland 15, Ohio (1, 2)  
 Pass & Seymour, Inc., Syracuse 9, N. Y. (1, 2)  
 Perfect-Line Mfg. Corp., Old Country Rd. & Railroad Ave., P. O. Box 65, Hicksville, L. I., N. Y. (2)  
 Prescolite Mfg. Corp., 2229 Fourth St., Berkeley 10, Calif. (1, 2)  
 Progress Mfg. Co., Inc., Castor Ave. & Tulp St., Phila. 34, Pa. (1, 2)  
 Quaker City Electric Mfg. Co., 2810 E. Pacific St., Phila. 34, Pa. (2)  
 Rab Electric Mfg. Co., Inc., 605 E. 132 St., New York 54, N. Y. (1)  
 Reinhardt-McArthur Co., 2247 Gravois Ave., St. Louis 4, Mo. (1)  
 Revere Electric Mfg. Co., 6017 Broadway, Chicago 40, Ill. (1)  
 Ro-Son, Inc., 98 N. 7th St., Brooklyn 11, N. Y. (1, 2)  
 Royaline Preferred Lighting Corp., 862 Newark Ave., Jersey City 6, N. J. (2)  
 Ruby-Phillips Corp., 32-02 Queens Blvd., L. I. C. 1, N. Y. (2)  
 S & M Lamp Co., 119 W. 36th Pl., Los Angeles 7, Calif. (1)  
 Segil Co., L. J., 2500 W. North Ave., Chicago 47, Ill. (1, 2)  
 Shalda Mfg. Co., Inc., 156 W. Providencia Ave., Burbank, Calif. (1)  
 Silway Lighting, Inc., 100 W. Main St., Bound Brook, N. J. (2)  
 Smithcraft Lighting Div., A. L. Smith Iron Co., 217 Everett Ave., Chelsea 50, Mass. (2)  
 Solux Corp., 58-17 28th Ave., Woodside 77, L. I., N. Y. (1, 2)  
 Stamford Lighting, 429 W. Broadway, New York 12, N. Y. (2)  
 Standard Rite-Lite Co., 4206 West Ave., Ashtabula, Ohio (2)  
 Steber Mfg. Co., 2700 Roosevelt Rd., Broadview, Ill. (1)  
 Stocker & Yale, Inc., Green St., Marblehead, Mass. (2)  
 Swiveller Co., Inc., 43-34th St., Brooklyn 32, N. Y. (1, 2)  
 Sylvania Electric Products, Inc., 1740 Broadway, N. Y. 19, N. Y. (2)

# UNION

## NON-METALLIC FIXTURES



No. 169 Porch Light

A bug proof, vapor tight, non-corrosive fixture which eliminates unsightly collection of dust and insects and protects lamp shell and socket from corrosive atmospheres. BAKELITE cover and adapter ring protect fixture. Fits 3 1/4" or 4" box; takes 100 watt lamp.

**UNION INSULATING CO.**  
Parkersburg, West Va.

Union Insulating Co., Inc., Box 351 Parkersburg, W. Va. (1, 2)  
Utilities Service Co., 1 Pine St., Allentown, Pa. (1)  
Versen Co., Kurt, Englewood, N. J. (2)  
Virden Co., John C., 5009-6103 Longfellow Ave., Cleveland 3, Ohio (1, 2)  
Weiss and Biheller Merchandise Corp., 584 Broadway, N. Y. 12, N. Y. (1, 2)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2)  
White Co., O. C., 15-21 Hermon St., Worcester 8, Mass. (2)  
Williams Products Co., H. E., 106 S. Main St., Carthage, Mo. (2)

### FIXTURES, Lighting, Special Purpose

1. Airport, Outdoor
2. Beacons
3. Christmas Tree Sets
4. Combined with Oxonator
5. Floodlights
6. Road Exit and Entrance
7. Searchlights
8. Spotlights
9. Stage
10. Street and Yard
11. Vaportight

Abolite Lighting Div., Jones Metal Products Co., West Lafayette, Ohio (1, 5, 8, 10, 11)  
Adalet Mfg. Co., 14300 Lorain Ave., Cleveland 11, Ohio (11)  
Aerolux Lights Corp., 653 11th Ave., New York 36, N. Y. (2, 3, 6, 11)  
Afco Lite Corp., 1234 N. Paulina St., Chicago 22, Ill. (5, 8)  
Alkco Mfg. Co., 4242 N. Lincoln Ave., Chicago 18, Ill. (6)  
Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. (10, 11)  
Art Metal Co., 1814 E. 40 St., Cleveland 3, Ohio (8, 10, 11)  
Associated Lighting Service, 876 Kaymyn St., Redwood City, Calif. (5, 8, 9)  
Beckley Electric Co., Inc., 468-470 Grand Ave., Brooklyn 38, N. Y. (5)  
Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (5, 8, 10, 11)  
Cable Electric Products Inc., 234 Daboll St., Providence 7, R. I. (3, 5, 10)  
Capital Stage Lighting Co., Inc., 527 W. 45 St., New York 36, N. Y. (5, 8, 9)  
Century Lighting Inc., 521 W. 43 St., New York 36, N. Y. (5, 8, 9)  
Cole & Co., Inc., C. W., 320 E. 12 St., Los Angeles 15, Calif. (6, 8, 9, 10, 11)  
Compco Corp., 2251 W. St. Paul Ave., Chicago 47, Ill. (5, 10)

# ADALET

## VAPOR-TIGHT WEATHERPROOF LIGHTING FIXTURES

EASY SELECTION

EASY STOCKING

EASY INSTALLATION

EASY MAINTENANCE



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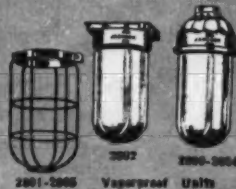


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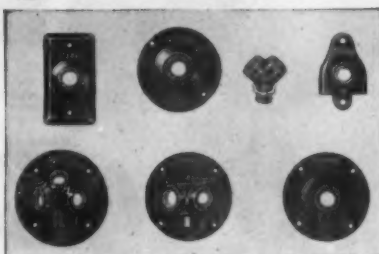
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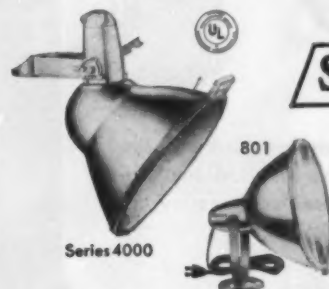
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Lucifer Furnaces, Inc., Neshaminy, Pa.  
Perry Equipment Co., 893 Chambers Road (Station A, Box 153), Columbus, Ohio  
Steiner-Ives Co., Springfield Rd., Union, N. J.  
Thermo Electric Mfg. Co., 465 Huff St., Dubuque, Iowa  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.

**FURNACES, Induction—see HEATERS (Classified as to Design), Induction**

#### FUSES

1. Aircraft
2. Cartridge, Non-Renewable
3. Cartridge, Renewable
4. High Voltage, Over 600 Volts
5. Open Link
6. Plug, Non-Renewable
7. Plug, Renewable
8. Time Delay

## PRODUCT DIRECTORY

Bussmann Mfg. Co., 2536 W. University St., St. Louis 7, Mo. (1, 2, 3, 4, 5, 6, 8)  
 Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (2, 6)  
 Chance Co., A. B., 210 N. Allen St., Centralia, Mo. (2, 4)  
 Chase-Shawmut Co., 374 Merrimac St., Newburyport, Mass. (6, 8)  
 Commercial Enclosed Fuse Co. of N. J., 6812 Polk St., Guttenberg, N. J. (1, 2, 3, 4, 5, 6)  
 Dependable-Electric Mfg. Co., Inc., 18 Johnson Ave., Brooklyn 6, N. Y. (2, 6)  
 Duro-Test Corp., 2321 Hudson Blvd., North Bergen, N. J. (2, 3, 6)  
 Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (2, 3, 4, 6, 8)  
 Economy Fuse & Mfg. Co., 2737 N. Greenview Ave., Chicago 14, Ill. (2, 3, 5, 6, 7, 8)  
 Excel Fuse Co., 117 W. Erie St., Pittsburgh 12, Pa. (3)  
 Gem Electric Mfg. Co., Inc., 237 37th St., Brooklyn, N. Y. (2, 3, 5, 6)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (4, 5)  
 General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn. (6, 8)  
 General Electric Co., Wiring Device Dept., 95 Hathaway St., Providence 7, R. I. (6, 8)  
 ● GRAYBAR ELECTRIC CO., INC., 420 Lexington Ave., N. Y. 17, N. Y. (7) —ADV. PG. 2  
 Great Western Fuse Div., Titeflex, Inc., 590 Frelinghuysen Ave., Newark 5, N. J. (3, 8)  
 Jefferson Electric Co., 25th & Madison, Bellwood, Ill. (6, 7, 8)  
 Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (4, 5, 8)  
 Kas-Kel Electric Co., Inc., 5 Union Sq., N. Y. 3, N. Y. (6)  
 Line Material Co., 700 West Michigan St., Milwaukee, Wis. (4, 5)  
 Littelfuse, Inc., 1865 Minar St., Des Plaines, Ill. (1, 2, 4, 8)  
 Miller Electric Co., 120 Main St., Pawtucket, R. I. (2, 6)  
 Monarch Fuse Co., Ltd., 118 E. First St., Jamestown, N. Y. (2, 3, 8)  
 Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (5)  
 Pierce Renewable Fuses, Inc., Box F, Leicester, N. Y. (2, 3, 5, 6, 7, 8)  
 Rodale Mfg. Co., Inc., 6th & Minor Sts., Emmaus, Pa. (6)  
 Royal Electric Co., Inc., 95 Grand Ave., Pawtucket, R. I. (2, 3, 6, 8)  
 S & C Electric Co., 4435 Ravenswood Ave., Chicago 40, Ill. (4, 5)  
 Solar Electric Corp., 121 Central Ave., Warren, Pa. (3, 6)  
 Trico Fuse Mfg. Co., 2948 No. 5th St., Milwaukee 12, Wis. (8)  
 Ware Fuse Corp., 4400 W. Lake St., Chicago 24, Ill. (2, 3)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (4, 5)  
 Wing Mfg. Co., L. J., Linden, N. J. (7, 8)

### FUSES, Misc.

Dummy Plug—see PLUGS, Dummy Fuse  
 Thermal Cutout—see CUTOUTS, Thermal

## G

### GAGES

1. Feeler
2. Measuring, Electronic
3. Strain
4. Thickness
5. Transformer Oil Level
6. Wire

Amhor Testing Instrument Co., Inc., 45 Van Sinderen Ave., Brooklyn 7, N. Y. (4)  
 Automatic Temperature Control Co., Inc., 5212 Pulaski Ave., Philadelphia 44, Pa. (2)  
 Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland 10, Ohio (2)  
 Bristol Co., Waterbury 20, Conn. (2, 3)  
 Brush Electronics Co., 3405 Perkins Ave., Cleveland 14, Ohio (2)  
 Dice Co., J. W., Englewood, N. J. (4)  
 Dillon & Co., W. C., 14620 Keswick St., Van Nuys, Calif. (3)  
 DoAll Co., 254 N. Laurel Ave., Des Plaines, Ill. (2, 4)  
 Eltzen Co., Louis C., 17 W. 60 St., New York 23, N. Y. (3)  
 Fielden Instrument Div., Robertshaw-Fulton Controls Co., 2920 N. Fourth St., Philadelphia 33, Pa. (4)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (2, 3, 4, 5)  
 General Electric Co., X-Ray Dept., 4855 Electric Ave., Milwaukee 1, Wis. (4)  
 Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill. (1, 4)  
 Inferno Co., 115 Ricou St., Shreveport, La. (5)  
 Kastar, Inc., 200-208 Lincoln Ave., N. Y. 54, N. Y. (1, 4)  
 Magnetrol, Inc., 2110 S. Marshall Blvd., Chicago 23, Ill. (5)  
 Markindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio (4)  
 Millers Falls Co., 57 Wells St., Greenfield, Mass. (1, 4)

Neuses, Inc., P. K., W. Euclid & Dwyer Sts., Arlington Heights, Ill. (1, 4)  
 Owatonna Tool Co., Owatonna, Minn. (4)  
 Peschel Electronics, Inc., 13 Garden St., New Rochelle, N. Y. (2)  
 Roanwell Corp., 662 Pacific St., Brooklyn 17, New York (4)  
 Snap-On Tools Corp., 8028-28th Ave., Kenosha, Wis. (1)  
 Starrett Co., L. S., 50 Crescent St., Athol, Mass. (1, 4, 6)  
 Union Tool Co., 48 E. River St., Orange, Mass. (1, 4)  
 U. S. Gauge Div., American Machine & Metals, Inc., Clymer Ave., Sellersville, Pa. (5)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (2)  
 Wilde Drop Forge and Tool Co., 2936-40 Fairmount, Kansas City 8, Mo. (1)

### GAGES, Gap—see TOOLS, Armature Repair

### GAINS, Metal Pole

Hughes Bros., Inc., Seward, Neb.  
 Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill.  
 Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif.  
 Malleable Iron Fittings Co., Branford, Conn.  
 Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa.  
 Utilities Service Co., 1 Pine St., Allentown, Pa.

### GALVANOMETERS

Assembly Products, Inc., Chesterland 31, Ohio  
 Biddle Co., James G., 1316 Arch St., Philadelphia 7, Pa.  
 Consolidated Engineering Corp., 300 N. Sierra Madre Villa, Pasadena 15, Calif.  
 Doelcam Div., Minneapolis-Honeywell Reg. Co., 1400 Soldiers Field Rd., Boston 35, Mass.  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
 Marlon Electrical Instrument Co., 40 Canal St., Manchester, N. H.  
 Meters, Inc., 5353 N. Keystone Ave., Indianapolis 20, Ind.  
 Sanborn Co., 195 Massachusetts Ave., Cambridge, Mass.  
 Sensitive Research Instrument Corp., 9 Elm Ave., Mount Vernon, N. Y.  
 Shallcross Mfg. Co., 33 Lincoln Ave., Collindale, Pa.  
 Simpson Electric Co., 5200 W. Kinzie St., Chicago 44, Ill.  
 Triplet Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio  
 Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark 5, N. J.

### GAPS, Protective—see ARRESTERS, Lightning, Power Line

### GASKETS

1. Appliance
2. Conduit Fitting
3. Junction Box
4. Refrigerator Door

Acme Mfg. & Gasket Co., 738 N. 41 St., Philadelphia 4, Pa. (1)  
 Adalet Mfg. Co., 14300 Lorain Ave., Cleveland 11, Ohio (2)  
 Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. (2, 3)  
 Arrol Corp., Foot of Bower St., Montgomery, Pa. (2)  
 Auburn Mfg. Co., Pease Ave. & Stack St., Middletown Conn. (1, 2, 3, 4)  
 Bonnell Electric Mfg. Co., Inc., 192-194 Chambers St., N. Y. 7, N. Y. (3)  
 Chicago Rawhide Mfg. Co., 1301 Elston Ave., Chicago 22, Ill. (1)  
 Crouse-Hinds Co., Syracuse 1, N. Y. (2, 3)  
 Electrical Fittings Corp., 37-50 57th St., Woodside 77, N. Y. (2)  
 Excelsior Leather Washer Mfg. Co., Inc., 720 Chestnut St., Rockford, Ill. (1, 2, 3, 4)  
 Felt Products Mfg. Co., 1514 Carroll Ave., Chicago 7, Ill. (1, 2, 3, 4)  
 Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (2)  
 Goodyear Industrial Products Co., Inc., 18 Murray St., N. Y. (3, 4)  
 Howard Electric, 1700 N. Kostner Ave., Chicago 39, Ill. (3)  
 Mica Insulator Co., P. O. Box 1076, Schenectady 1, N. Y. (1)  
 Miller Products Co., Inc., 29 Warren St., N. Y. 7, N. Y. (3, 4)  
 Minor Rubber Co., Inc., 51 Ackerman St., Bloomfield, N. J. (1, 4)  
 Penn Fibre & Specialty Co., Inc., 2024 E. Westmoreland St., Philadelphia 34, Pa. (1, 2, 3)  
 Pyle-National Co., 1344 N. Kostner Ave., Chicago, 51, Ill. (2, 3)  
 Rogers Corp., Rogers, Conn. (1)  
 Simplex Electric Co., 5136 Park Ave., Sycamore, Ill. (2, 3)  
 Spaulding Fibre Co., Inc., 310 Wheeler St., Tonawanda, N. Y. (4)  
 Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (2, 3)  
 Taylor Fibre Co., Norristown, Pa. (3, 4)  
 Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J. (3)

Wilmington Fibre Specialty Co., New Castle, Dela. (1, 4)

### GATE-OPENERS—see OPERATORS

### GAUGES—see GAGES

### GEARMOTORS—see MOTORS (Classified as to Design), Gear

### GEARS and PINIONS

1. Fibre and Fabric
2. Metal
3. Plastic
4. Rawhide

Abart Gear & Machine Co., 4830 W. 16 St., Chicago 50, Ill. (1, 2, 3, 4)  
 Aitken-Read Inc., 2802 Wollmer St., Mantowoc, Wis. (2)  
 Auburn Mfg. Co., Pease Ave. & Stack St., Middletown, Conn. (1, 4)  
 Chicago Rawhide Mfg. Co., 1301 Elston Ave., Chicago 22, Ill. (1, 2, 4)  
 Continental-Diamond Fibre Co., Newark, Del. (1, 3)  
 Crown Controls Co., Inc., 40-44 S. Washington St., New Bremen, Ohio (2)  
 Falk Corp., 3022 W. Canal St., Milwaukee 8, Wis. (2)  
 Flood City Brass & Electric Co., Messenger & Elder Sts., Johnstown, Pa. (1, 2)  
 Foote Bros. Gear & Machine Corp., 4545 S. Western Blvd., Chicago 9, Ill. (1, 2, 4)  
 Grant Gear Works, 154 W. Second St., South Boston 27, Mass. (1, 2, 4)  
 Griet Reproducer Corp., 123 Beechwood St., New Rochelle, N. Y. (2, 3)  
 Hewitt-Robins, Inc., 666 Glenbrook Rd., Stamford, Conn. (2)  
 Howard Industries Inc., 1760 State St., Racine, Wis. (1, 2)  
 Link-Belt Co., 307 N. Michigan Ave., Chicago 1, Ill. (2)  
 Massachusetts Gear & Tool Co., 28 Nashua St., Woburn, Mass. (1, 2, 3)  
 Mastercraft Plastics Co., Inc., 95-01 150th St., Jamaica 35, N. Y. (3)  
 Merkle-Korff Gear Co., 213 N. Morgan St., Chicago 7, Ill. (1, 2)  
 Mica Insulator Co., P. O. Box 1076, Schenectady 1, N. Y. (3)  
 Penn Fibre & Specialty Co., 2024 E. Westmoreland St., Philadelphia 34, Pa. (1)  
 Perkins Machine & Gear Co., Circuit Ave., West Springfield, Mass. (1, 2)  
 Philadelphia Gear Works Inc., Erie Ave. & G St., Philadelphia 34, Pa. (1, 2, 4)  
 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)  
 Steel Co., Herman D., 225 Lafayette Bldg., Philadelphia 6, Pa. (2)  
 Synthane Corp., Oaks, Pa. (1)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (2, 3)  
 Wilmington Fibre Specialty Co., New Castle, Dela. (1)

### GENERATORS

1. AC
2. DC, Constant Current
3. DC, Flating
4. DC, Shunt and Compound
5. DC, Three Wire
6. Double Current
7. Hazardous Location
8. High Cycle

Ajax Electrothermic Corp., Ajax Park, Trenton 5, N. J. (8)  
 Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (1, 2, 3, 4, 5, 6, 7, 8)  
 Allis Co., Louis, 427 E. Stewart St., Milwaukee 7, Wis. (1, 2, 4, 5, 6, 7, 8)  
 American Electronics, Inc., 4811 Telegraph Rd., Los Angeles 22, Calif. (1, 6, 8)  
 Arga Div., Beckman Instruments, Inc., 220 Pasadena Ave., South Pasadena, Calif. (1)  
 Bogue Electric Mfg. Co., 52 Iowa Ave., Paterson 3, N. J. (4, 8)  
 Brown-Brockmeyer Co., 1000 S. Smithville Rd., Dayton 1, Ohio (4, 7)  
 Brush Abco, Inc., 60-07 39th Ave., Woodside 77, Long Island, N. Y. (1, 3, 4, 5)  
 Century Electric Co., 1806 Pine St., St. Louis 3, Mo. (1, 2, 4, 5, 6, 7)  
 Chandeyson Electric Co., 4084 Bingham Ave., St. Louis 16, Mo. (1, 3, 4, 8)  
 Columbia Electric Mfg. Co., 4519 Hamilton Ave., Cleveland 14, Ohio (1, 3, 4, 5, 7)  
 Continental Electric Co., Inc., 325 Ferry St., Newark 5, N. J. (1, 4, 5, 6, 7, 8)  
 Crocker-Wheeler Div., Elliott Co., Ampere, N. J. (2, 4, 5)  
 Daimler Co., 1375 Clay St., Santa Clara, Calif. (1)  
 Delco Products Div., General Motors Corp., 300 E. 1st St., Dayton 1, Ohio (1, 4, 5)  
 Electric Machinery Mfg. Co., 800 Central Ave., Minneapolis 13, Minn. (1, 8)  
 Electric Power Plants Corp., Buffalo St., Cadiz, Ohio (1, 4)  
 Electric Products Co., 1725 Clarkstone Rd., Cleveland 12, Ohio (1, 2, 3, 4, 5, 8)  
 Electric Specialty Co., 211 South St., Stamford, Conn. (1, 2, 3, 4, 5, 6, 8)



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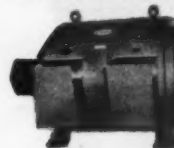
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Elliott Co., Jeannette, Pa. (1, 2, 4, 5, 7)  
Empire Corp., Suite 317, 611 N. Broadway, Milwaukee, Wis. (1, 2, 3, 4, 5, 6, 7, 8)  
Fairbanks, Morse & Co., 600 S. Michigan Ave., Chicago 5, Ill. (1, 2)  
Fidelity Electric Co., 617 N. Prince St., Lancaster, Pa. (1)  
General Armature & Mfg. Co., P. O. Box 370, Lock Haven, Pa. (2, 4, 5)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 3, 4, 5, 6, 7, 8)  
Georator Corp., Manassas, Va. (1, 7, 8)  
Hallett Mfg. Co., 1601 W. Florence Ave., Inglewood, Calif. (1, 2, 4, 5)  
Hertner Electric Co., 12690 Elmwood Ave., Cleveland 11, Ohio (1, 2, 4, 5, 8)  
Hobart Bros., Hobart Square, Troy 1, Ohio (2)  
Hollingsworth, John R., Nutt & French Creek Rds., Phoenixville, Pa. (1, 2)  
Holtzer-Cabot Div., National Pneumatic Co., Inc., 125 Amory St., Boston 19, Mass. (1, 4, 8)  
Homeite Corp., 67 Riverdale Ave., Port Chester, N. Y. (1, 2, 4, 6, 8)  
Howard Industries Inc., 1760 State St., Racine, Wis. (1, 2)  
Ideal Electric and Mfg. Co., East First St., Mansfield, Ohio (1, 2, 3, 4, 5, 6)  
Kato Engineering Co., Mankato, Minn. (1, 4, 8)  
Katolight Corp., First Ave. at Chestnut (P. O. Box 891), Mankato, Minn. (1, 4, 8)  
Kupfrian Mfg. Corp., 395 State St., Binghamton, N. Y. (1)  
Kurz & Root Co., Inc., 232 E. North Island St., Appleton, Wis. (1, 2, 4, 5, 8)  
Leland Electric Co., 1501 Webster St., Dayton 1, Ohio (1, 4, 8)  
Lincoln Electric Co., 22801 St. Clair Ave., Cleveland 17, Ohio (1, 4)  
Magniniss Power Tool Co., 154 Dist Ave., Mansfield, Ohio (8)  
Mail Tool Co., 7740 S. Chicago Ave., Chicago 19, Ill. (1, 2)  
Marathon Electric Mfg. Corp., Wausau, Wisc. (1, 2, 4, 5, 8)  
Master Electric Co., 126 Davis Ave., Dayton 1, Ohio (1, 4)  
Master Vibrator Co., 1752 Stanley Ave. (P. O. Box 657), Dayton 1, Ohio (1, 4)  
Midco Mfg. & Distrib. Co., Inc., 1129 S. 13 St., Sheboygan, Wis. (1, 2)  
Moon Mfg. Co., 108 N. Jefferson St., Chicago 6, Ill. (1, 4)  
Motorsearch Co., 1600 Junction Ave., Racine, Wis. (1, 4, 8)  
Multi-Matic Corp., 14741 Bessemer St., Van Nuys, Calif. (1, 2, 4, 5, 6)

Newman Industries (America) Inc., 43 Broad St., New York 4, N. Y. (1)  
Onan & Sons Inc., D. W., University Ave. S. E. at 25th, Minneapolis 14, Minn. (1, 4, 6)  
Peerless Electric Co., 1401 W. Market St., Warren, Ohio (4)  
Porter-Cable Machine Co., 1714 N. Salina St., Syracuse 8, N. Y. (1, 2)  
Reliance Electric & Engineering Co., 1068 Ivanhoe Rd., Cleveland 10, Ohio (2, 4)  
Safety Car Heating and Lighting Co., Inc., P. O. Box 904, New Haven 4, Conn. (4, 6)  
Simpson Electric Co., 5200 W. Kinzie St., Chicago 44, Ill. (1)  
Star-Kimble Motor Div., Miehle Printing Press & Mfg. Co., 200 Bloomfield Ave., Bloomfield, N. J. (1, 2, 3, 4, 5, 6, 7, 8)  
Tocco Div., Ohio Crankshaft Co., 3800 Harvard Ave., Cleveland 1, Ohio (8)  
Trindl Products, Ltd., 1807-11 S. Clark St., Chicago 16, Ill. (1)  
United Electric Machinery Co., 1824E N. 72 Ct., Elmwood Park, Ill. (1, 4)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2, 4, 5, 7)  
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark 5, N. J. (1, 2, 7)  
Wincharger Corp., E. Seventh & Division St., Sioux City 6, Iowa (1, 2, 4, 5)  
Winpower Mfg. Co., Newton, Iowa (1, 2, 4, 5, 6)

### GENERATORS, Ozone

Air-Tron, Inc., 3536 W. 16 St., Indianapolis 22, Ind.  
Capson Mfg. Co., 2565 W. Fullerton Ave., Chicago 47, Ill.  
Estelle Co., Inc., P. O. Box 230, Hoosick Falls, N. Y.  
H. & H. Fixture Co., 1313 Walton Ave., St. Louis 13, Mo.  
Sanitron, Inc., 24-10 40th Ave., Long Island City 1, N. Y.

### GENERATORS, Misc.

Home Lighting—see PLANTS  
Motor—see MOTOR-GENERATORS  
Welding—see GENERATORS, DC, Constant Current

### GERMICIDAL Lamps—see LAMPS, Electric Discharge, Germicidal

### GINs, Hoisting—see TRANSFORMER GINs

### GLASSWARE, Illuminating—see GLOBES

### GLOBES

1. Gloss  
2. Vaporproof  
Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (2)  
Corning Glass Works, Corning, N. Y. (1)  
● CROUSE-HINDS Co., Syracuse 1, N. Y. (1, 2)—ADV. PG. 116-117  
Elite Glass Co., Inc., 111 W. 22nd St., New York 11, N. Y. (1)  
Erie Glass Mfg. Co., 564 Union Trust Bldg., Pittsburgh 19, Pa. (1)  
Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (2)  
Gil Glass and Fixture Co., Amber & Tioga Sts., Phila. 34, Pa. (1)  
Lancaster Lens Co., Lancaster, Ohio (1, 2)  
McKee Div., Thatcher Glass Mfg. Co., Inc., Grand Central Ave., Elmira, N. Y. (12)  
McPhibben Mfg. Co., Inc., 1329 Willoughby Ave., Brooklyn 37, N. Y. (1, 2)  
Multi Electric Mfg. Inc., 4223 W. Lake St., Chicago 24, Ill. (2)  
Pyle-National Co., 1334 N. Kostner Ave., Chicago 51, Ill. (2)  
● RUSSELL & STOLL CO., INC., 125 Barclay St., New York 7, N. Y. (1, 2)—ADV. PG. THIRD COVER  
Versen Co., Kurt, Englewood, N. J. (1)  
Weiss and Bieller Merchandise Corp., 584 Broadway, N. Y. 12, N. Y. (1)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1)

### GLOVES

1. Lineman's Leather  
2. Rubber  
Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa. (1, 2)  
Charleston Rubber Co., Stark Industrial Park, Charleston, S. C. (1, 2)  
David's Gloves, Inc., 21 W. Pleasant St., Springfield, Ohio (1, 2)  
Goodrich Co., B. F., Industrial Products Div., 500 S. Main St., Akron, Ohio (2)  
Goodyear Industrial Products Co., Inc., 18 Murray St., N. Y., N. Y. (1, 2)  
Industrial Products Co., 2695 N. Fourth St., Phila. 33, Pa. (1, 2)  
Miller Equipment Co., Inc., 13th & New Streets, Franklin, Pa. (1)  
Miller Products Co., Inc., 29 Warren St., N. Y. 7, N. Y. (1, 2)  
Mine Safety Appliances Co., 201 N. Braddock Ave., Pittsburgh 8, Pa. (1, 2)

Minor Rubber Co., Inc., 51 Ackerman St., Bloomfield, N. J. (1, 2)  
Salisbury & Co., W. H., 401 N. Morgan St., Chicago 22, Ill. (1, 2)  
Snyder & Son, Inc., M. L., Jasper & York Sts., Phila. 25, Pa. (1, 2)  
Surety Rubber Co., 123 Hall Ave., Carrohton, Ohio (1, 2)  
Utilities Safety Supply Co., Inc., 3112 Indiana Ave., Kansas City 3, Mo. (1, 2)  
Utilities Service Co., 1 Pine St., Allentown, Pa. (1)  
Wilson Rubber Co., 1200 Garfield Ave. S. W., Canton 6, Ohio (1, 2)

### GOGGLES, Safety

Dockson Corp., 3839 Wabash Ave., Detroit 8, Mich.  
General Scientific Equipment Co., 27th & Huntington Sts., Phila. 32, Pa.  
Linde Air Products Co., 30 E. 42 St., N. Y. 17, N. Y.  
Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio  
Mine Safety Appliances Co., 201 N. Braddock Ave., Pittsburgh 8, Pa.

### GONGS—see BELLS, Unmounted

### GOOSENECKS, Conduit

Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill.  
Conduit Nipple Mfg. Co., 1455 Spring Garden Ave., Pittsburgh 12, Pa.  
Conduit Pipe Products Co., 157 W. Fulton St., Columbus 16, Ohio  
Electrical Fittings Corp., 37-50 57th St., Woodside 77, N. Y.  
Pipe Coupling Mfrs., Inc., P. O. Box 488, Martins Ferry, Ohio  
Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y.

### GOVERNORS, Motor Speed

Haydon Co., A. W., 232 N. Elm St., Waterbury, Conn.

### GRAPPLES, Conduit Rod

Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y.

### GREASES, Lubricating—see OILS, Lubricating

### GRIDS, Resistance—see RESISTORS, Unit

### GRINDERS

1. Commutator  
2. Hand, Portable  
Black & Decker Mfg. Co., Towson 4, Md. (2)  
Chicago Pneumatic Tool Co., 6 E. 44 St., N. Y. 17, N. Y. (2)  
Chicago Wheel & Mfg. Co., 1101 W. Monroe St., Chicago 7, Ill. (2)  
Cincinnati Electrical Tool Co., Madison & Edwards Rd., Cincinnati 8, Ohio (2)  
Cummins Portable Tool Div., John Oster Mfg. Co., 5055 N. Lyndell Ave., Milwaukee 17, Wis. (2)  
Dumore Co., 1300 17th St., Racine, Wis. (1, 2)  
Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa. (1)  
Foredom Electric Co., 27 Park Place, New York 7, N. Y. (2)  
Jefferson Engineering & Mfg. Co., 269 Walker St., Detroit 7, Mich. (2)  
Jordan Bros. Inc., 74 Beekman St., N. Y. 38, N. Y. (1)  
Mail Tool Co., 7740 S. Chicago Ave., Chicago 19, Ill. (2)  
Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio (1)  
Milwaukee Electric Tool Corp., 5352 W. State St., Milwaukee 8, Wis. (2)  
Nedco Co., 88 Rumford Ave., Waltham 54, Mass. (2)  
Portable Electric Tools, Inc., 320 W. 83 St., Chicago 20, Ill. (2)  
Skil Corp., 5033 Elston Ave., Chicago 30, Ill. (2)  
SpeedWay Mfg. Co., 1834 S. 52 Ave., Cicero 50, Ill. (2)  
Waveland Electric Co., 5542 N. Ashland Ave., Chicago 40, Ill. (1)  
Wyzenbeek & Staff, Inc., 223 N. California Ave., Chicago 12, Ill. (2)

### GRIPS

1. Cable and Wire  
2. Fish Taps  
3. Tubular Rubber or Plastic  
Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa. (1)  
Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y. (1, 2)  
Buffalo Machine Mfg. Co., 585 Tonawanda St., Buffalo 7, N. Y. (1)  
Burbank Electrical Products, 215 W. Palm Ave., P. O. Box 7, Burbank, Calif. (2)  
Chance Co., A. B., 210 N. Allen St., Centralia, Mo. (1)

## PRODUCT DIRECTORY

Cope, Inc., T. J., 711 S. So. St., Phila. 43, Pa. (2)  
Crescent Tool Co., 200 Harrison St., Jamestown,  
N. Y. (1)  
Dicke Tool Co., 1201 Warren Ave., Downers Grove,  
Ill. (1)  
Ideal Industries, Inc., 5136 Park Ave., Sycamore,  
Ill. (1)  
Kearney Corp., James R., 4236 Clayton Ave., St.  
Louis 10, Mo. (1)  
Keliens Co., 15 Williams St., Stonington, Conn. (1)  
Klein & Sons, Mathias, 7200 McCormick Rd., Chi-  
cago 14, Ill. (1, 2)  
Laughlin Co., Thomas, 143 Fore St., Portland 6,  
Maine (1)  
Pyle-National Co., 1344 N. Kostner Ave., Chicago  
51, Ill. (1)  
Reliable Electric Co., 3145 Carroll Ave., Chicago  
12, Ill. (1)  
Safety Live Line Tool Co., 973 86th Ave., Oakland  
21, Calif. (1)  
Steel Electric Products Co., Inc., 5602 18th Ave.,  
Brooklyn 4, N. Y. (2)

### GRIPS, Cord Strain Relief—see BASES, Attach- ment Plug; CAPS, Attachment Plug

### GROMMETS, Plastic, Rubber and Fibre

Adafet Mfg. Co., 14300 Lorain Ave., Cleveland 11,  
Ohio  
Auburn Mfg. Co., Pease Ave. & Stack St., Middle-  
town, Conn.  
Continental-Diamond Fibre Co., Newark, Del.  
Emeloid Co., Inc., 1239 Central Ave., Hillside 5,  
N. J.  
Excelsior Leather Washer Mfg. Co., Inc., 720 Chest-  
nut St., Rockford, Ill.  
Goodrich Co., B. F., Industrial Products Div., 500  
S. Main St., Akron, Ohio  
Hallett Mfg. Co., 1601 W. Florence Ave., Ingle-  
wood, Calif.  
Mica Insulator Co., P. O. Box 1076, Schenectady 1,  
N. Y.  
Midwest Rubber Co., 14275 E. Nine Mile Rd.,  
East Detroit, Mich.  
Miller Products Co., Inc., 29 Warren St., N. Y. 7,  
N. Y.  
Minor Rubber Co., Inc., 51 Ackerman St., Bloom-  
field, N. J.  
Penn Fibre & Specialty Co., Inc., 2024 E. West-  
moreland St., Phila. 34, Pa.  
Pyle-National Co., 1344 N. Kostner Ave., Chicago  
51, Ill.  
Raybestos-Manhattan, Inc., 61 Willett St., Passaic,  
N. J.  
Rodale Mfg. Co., Inc., 6th & Minor Sts., Emmaus,  
Pa.  
Shakeproof Div., Illinois Tool Works, St. Charles  
Rd., Elgin, Ill.  
Sierra Electric Corp., 15100 S. Figueroa, Gardena,  
Calif.  
Silicone Insulation, Inc., 567 Third Ave., New York  
16, N. Y.  
Spaulding Fibre Co., Inc., 310 Wheeler St.,  
Tonawanda, N. Y.  
United States Rubber Co., Mechanical Goods Div.,  
1230 Avenue of the Americas, New York 20,  
N. Y.  
Wilmington Fibre Specialty Co., New Castle, Dela.  
Yorkville Metal Products Co., 677 Broadway, N. Y.  
12, N. Y.

### GROUNDS, Wiring—see CLAMPS, Ground; RODS, Ground

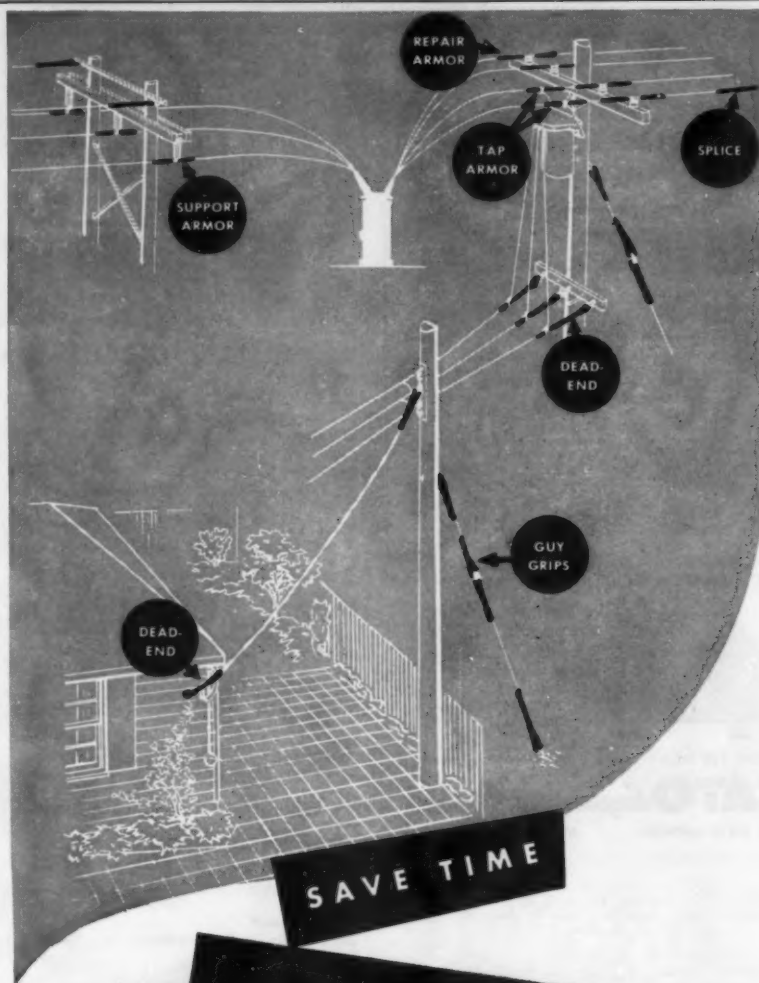
### GROWLERS, ARMATURE

Crown Industrial Products Co., 713 Amsterdam St.,  
Woodstock, Ill.  
Insulation and Wires Inc., 3435 Chouteau Ave., St.  
Louis 3, Mo.  
Martindale Electric Co., 1383 Hird Ave., Cleveland  
7, Ohio  
Potter & Rayfield, Inc., P. O. Box 1042, Atlanta,  
Ga.  
Schauer Mfg. Corp., 4500 Alpine Ave., Rossmoyne,  
Ohio  
Snap-On Tools Corp., 8028-28th Ave., Kenosha,  
Wis.  
Weidenhoff, Inc., Joseph, Algona, Iowa

### GUARDS

1. Fixture
2. Lamp
3. Manhole
4. Thread, Pipe and Conduit

Abolite Lighting Div., Jones Metal Products Co.,  
West Lafayette, Ohio (1, 2)  
Argo Products Co., 1008 N. 22 St., St. Louis 6,  
Mo. (2)  
Associated Lighting Service, 876 Kaynme St., Red-  
wood City, Calif. (1, 2)  
Barnard Co., Inc., B. S., 128 Lafayette St., New  
York 13, N. Y. (3)  
Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa.  
(3, 4)  
Benjamin Electric Mfg. Co., Northwest Highway &  
Seegers Rd., Des Plaines, Ill. (1, 2)  
Cable Electric Products, Inc., 234 Daboll St.,  
Providence 7, R. I. (2)  
Chadsey Corp., P. O. Box 1058, Hartford 1, Conn.  
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 ● COPE, INC., T. J., 711 S. 50 St., Phila. 43, Pa. (3)—ADV. PG. 112-113  
 ● CROUSE-HINDS CO., Syracuse 1, N. Y. (1, 2)—ADV. PG. 116-117  
 Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (2)  
 Electric Cord Co., 195 William St., N. Y. 38, N. Y. (2)  
 Erlson Mfg. Co., 5209 Euclid Ave., P. O. Box 1401, Cleveland 3, Ohio (2)  
 Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (1, 4)  
 Get-A-Lite Co., 3865 N. Milwaukee Ave., Chicago 41, Ill. (2)  
 Gray Wire Specialty Co., 1791 E. 39 St., Cleveland 14, Ohio (1)  
 Industrial Products Co., 2695 N. Fourth St., Phila. 33, Pa. (2, 3)  
 Jackson Electrical Co., 906 W. Van Buren St., Chicago 7, Ill. (1)  
 Kas-Kel Electric Co., Inc., 5 Union Sq., N. Y. 3, N. Y. (2)  
 Killark Electric Mfg. Co., 3940 Easton Ave., St. Louis 13, Mo. (1)  
 Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif. (3)  
 ● MCGILL MFG. CO., INC., Valparaiso, Ind. (2)—ADV. PG. 132  
 McPhibben Mfg. Co., Inc., 1329 Willoughby Ave., Brooklyn 37, N. Y. (1)  
 Metalcraft Products Co., Inc., Mascher & Lippincott Sts., Phila. 33, Pa. (1)  
 Multi Electric Mfg. Inc., 4223 W. Lake St., Chicago 24, Ill. (1)  
 Quadrangle Mfg. Co., 32 S. Peoria St., Chicago 7, Ill. (1)  
 ● RODALE MFG. CO., INC., 6th & Minor Sts., Emmaus, Pa. (2)—ADV. PG. 143  
 Smoot-Holman Co., 321 N. Eucalyptus Ave. (P. O. Box 398), Inglewood, Calif. (2)  
 Spero Electric Corp., 20500 St. Clair Ave., Cleveland 17, Ohio (1, 2)  
 Swedish Iron & Steel Corp., 700 Quimby St., Westfield, N. J. (2)  
 Utilities Safety Supply Co. Inc., 3112 Indiana Ave., Kansas City 3, Mo. (3)  
 Wedge Protectors Inc., 3985 Jennings Rd., Cleveland 9, Ohio  
 Williams Products Co., H. E., 106 S. Main St., Carthage, Mo. (1)  
 Woodhead Co., Daniel, 15 N. Jefferson St., Chicago 6, Ill. (2)  
 Woodward Machine Co., Lighting Div., 4833 Elm-hurst, Detroit 4, Mich. (1, 2)  
 Yorkville Metal Products Co., 677 Broadway, N. Y. 12, N. Y. (2)

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1. Conductor
2. Gaff
3. Guy
4. Pole
5. Tree Wire

Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa. (2)  
 Chance Co., A. B., 210 N. Allen St., Centra-la, Mo. (3, 4)  
 Electrical Mfg. Co., Box 217, Battle Creek, Mich. (1, 3, 4)  
 Fanner Mfg. Co., Electrical Products Div., Brook-side Park, Cleveland 9, Ohio. (1, 5)  
 Hughes Bros., Inc., Seward, Neb. (3, 4, 5)  
 Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (3, 4)  
 Kearney Corp., James R., 4236 Clayton Ave., St. Louis 10, Mo. (3)  
 Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif. (3)  
 Miller Equipment Co., Inc., 13th & New Streets, Franklin, Pa. (2)  
 Mitchell Moulding Co., 1501 Circle Ave., Forest Park, Ill. (5)  
 Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (3, 4)  
 Preformed Line Products Co., 5349 St. Clair Ave., Cleveland 3, Ohio (1)  
 Safety Live Line Tool Co., 973 86th Ave., Oakland 21, Calif. (2)  
 Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa. (3)  
 Utilities Service Co., 1 Pine St., Allentown, Pa. (3)

### GUARDS, Misc.

Fan and Blower—see **BLADES, WHEELS and GUARDS, Fan and Blower**  
 Flush Switch—see **PLATES, Switch and Out-let, Flush**

### GUIDES, Cable Pull-in

Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y.  
 Cable Spinning Equipment Co., 3100 Topeka Ave., Topeka, Kan.  
 Cope, Inc., T. J., 711 S. 50 St., Phila. 43, Pa.  
 Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill.

### GUNS, Soldering—see **IRONS, Electric, Solder-ing; SOLDERING MACHINES**

### GUTTERS, Auxiliary Wiring—see **RACEWAY, Metal, Surface**

### HACKSAWS

1. Hand
2. Power Portable

Airserco Mfg. Co., Inc., 435 Melwood St., Pitts-burgh 13, Pa. (1)  
 Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa. (1)  
 Blackhawk Mfg. Co., 5325 W. Rogers, Milwaukee 46, Wis. (1)  
 Bridgeport Hardware Mfg. Corp., 461 Iranistan Ave., Bridgeport 5, Conn. (1)  
 Capewell Mfg. Co., 60-70 Governor St., Hartford 2, Conn. (1)  
 Clemson Bros., Inc., Middletown, N. Y. (1)  
 Crescent Tool Co., 200 Harrison St., Jamestown, N. Y. (1)  
 Disston & Sons, Inc., Henry, Unruh & Milnor Sts., Tacony, Phila. 35, Pa. (1, 2)  
 Dreier Brothers, Inc., 5642 Lake Park Ave., Chi-cago 37, Ill. (1)  
 Duro Metal Products Co., Kildare & Schubert Sts., Chicago, Ill. (1)  
 E-Z Way Tool Co., 128 W. Liberty St., Barrington, Ill. (2)  
 Forsberg Mfg. Co., 125 Seaview Ave., Bridgeport 1, Conn. (1, 2)  
 Lint, Clyde W., 2323 W. 18 St., Chicago 8, Ill. (2)  
 Lipe-Rollway Corp., 806 Emerson Ave., Syracuse 4, N. Y. (2)  
 Mephisto Tool Co., Inc., Box 16, Hudson, N. Y. (1)  
 Millers Falls Co., 57 Wells St., Greenfield, Mass. (1)  
 Milwaukee Electric Tool Corp., 5352 W. State St., Milwaukee 8, Wis. (2)  
 Oxwall Tool Co. Ltd., 928 Broadway, New York 10, N. Y. (1)  
 Porter-Cable Machine Co., 1714 N. Salina St., Syracuse 8, N. Y. (2)  
 Producers and Distributors, Inc., 1321 Hanover Ave., Allentown, Pa. (2)  
 Proto Tools, Box 3519 Terminal Annex, Los Angeles 54, Calif. (1)  
 Safety Live Line Tool Co., 973 86th Ave., Oak-land 21, Calif. (1)  
 Skil Corp., 5033 Elston Ave., Chicago 30, Ill. (2)  
 Snap-On Tools Corp., 8028-28th Ave., Kenosha, Wis. (1)

Standard Transmission Equipment Co., 70 W. Union St., Pasadena 1, Calif. (2)  
 Starrett Co., L. S., 50 Crescent St., Athol, Mass. (1)  
 Stevens Walden Inc., 40 Shrewsbury St., Worcester, Mass. (1)  
 Thompson & Son Co., Henry G., 277 Chapel St., New Haven 5, Conn. (1)  
 Wilde Drop Forge and Tool Co., 2936-40 Fair-mount, Kansas City 8, Mo. (1)

### HACKSAWS, Insulated—see **TOOLS, Hand, Insulated**

### HAMMERS

1. Carpenter's
2. Electrician's
3. Lineman's
4. Machinist's
5. Portable Electric

Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa. (1, 2, 3, 4)  
 Black & Decker Mfg. Co., Towson 4, Md. (5)  
 Blackhawk Mfg. Co., 5325 W. Rogers, Milwaukee 46, Wis. (4)  
 Bridgeport Hardware Mfg. Corp., 461 Iranistan Ave., Bridgeport 5, Conn. (1)  
 Capewell Mfg. Co., 60-70 Governor St., Hartford 2, Conn. (1, 2)  
 Champion DeArment Tool Co., South Main St., Meadville, Pa. (1, 2, 3, 4)  
 Chicago Pneumatic Tool Co., 6 E. 44 St., N. Y. 17, N. Y. (5)  
 Chicago Rawhide Mfg. Co., 1301 Elston Ave., Chi-cago 22, Ill. (4)  
 Collins Co., Collinsville, Conn. (1, 4)  
 Demo Tool Corp., 6735 Melrose Ave., Los Angeles, Calif. (5)  
 Duro Metal Products Co., Kildare & Schubert Sts., Chicago, Ill. (1, 4)  
 Forsberg Mfg. Co., 125 Seaview Ave., Bridgeport 1, Conn. (5)  
 Marineland Electric Co., 1383 Hird Ave., Cleve-land 7, Ohio (2)  
 Master Vibrator Co., 1752 Stanley Ave. (P. O. Box 657), Dayton 1, Ohio (5)  
 Mephisto Tool Co., Inc., Box 16, Hudson, N. Y. (1, 2, 4)  
 Miller Equipment Co., Inc., 13th & New Streets, Franklin, Pa. (3)  
 Millers Falls Co., 57 Wells St., Greenfield, Mass. (4)  
 Milwaukee Electric Tool Corp., 5352 W. State St., Milwaukee 8, Wis. (5)  
 Owatonna Tool Co., Owatonna, Minn. (4)  
 Oxwall Tool Co. Ltd., 928 Broadway, New York 10, N. Y. (1)



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 Safety Live Line Tool Co., 973 86th Ave., Oakland 21, Calif. (3)  
 Snap-On Tools Corp., 8028-28th Ave., Kenosha, Wis. (5)  
 Stanley Electric Tools, 436 Myrtle St., New Britain, Conn. (5)  
 Syntrol Co., 690 Lexington Ave., Homer City, Pa. (5)  
 Tempo Products Co., 2075 E. 63 St., Cleveland 3, Ohio (5)  
 Thor Power Tool Co., 175 N. State St., Aurora, Ill. (5)  
 Vichek Tool Co., 3001 E. 87th St., Cleveland 4, Ohio (1, 4)  
 Wodack Electric Tool Corp., 4627 W. Huron St., Chicago 44, Ill. (5)

#### HANDLES

**1. Portable Lamp**  
**2. Wooden Appliance**  
 Associated Lighting Service, 876 Kaynne St., Redwood City, Calif. (1)  
 Cable Electric Products Inc., 234 Daboll St., Providence 7, R. I. (1)  
**• CROUSE-HINDS CO.,** Syracuse 1, N. Y. (1)—ADV. PG. 116-117  
 Ericson Mfg. Co., 5209 Euclid Ave., P. O. Box 1401, Cleveland 3, Ohio (1)  
 Estes & Sons, E. B., 100 Fifth Ave., N. Y. 13, N. Y. (2)  
 Industrial Products Co., 2695 N. Fourth St., Phila. 33, Pa. (1)  
 Kas-Kel Electric Co., Inc., 5 Union Sq., N. Y. 3, N. Y. (1)  
 Martindale Electric Co., 1303 Hird Ave., Cleveland 7, Ohio (1)  
 Safety Live Line Tool Co., 973 86th Ave., Oakland 21, Calif. (2)  
 Woodhead Co., Daniel, 15 N. Jefferson St., Chicago 6, Ill. (1)

#### HANGERS

**1. Conduit**  
**2. Messenger Wire**  
**3. Outlet Box**  
 Abolite Lighting Div., Jones Metal Products Co., West Lafayette, Ohio (1, 3)  
 Adalet Mfg. Co., 14300 Lorain Ave., Cleveland 11, Ohio (1)  
**• ALL-STEEL EQUIPMENT INC.,** Aurora, Ill. (3)—ADV. PG. 114  
 American Steel & Iron Works, 5801 S. Lowe Ave., Chicago 21, Ill. (1, 2)  
 Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. (1, 5)  
 Arrol Corp., Foot of Bower St., Montgomery, Pa. (3)

Arrow Conduit & Fittings Corp., 129 30th St., Brooklyn 32, N. Y. (3)  
 Blackhawk Industries, 250 S. Main St., Dubuque, Iowa (1)  
 Bowers Mfg. Co., Inc., 6700 Avalon Blvd., Los Angeles 3, Calif. (3)  
 Burbank Electrical Products, 215 W. Palm Ave., P. O. Box 7, Burbank, Calif. (3)  
**• CROUSE-HINDS CO.,** Syracuse 1, N. Y. (1)—ADV. PG. 116-117  
 Fullman Mfg. Co., 1209-1215 Jefferson St., Latrobe, Pa. (1)  
 Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (1)  
 Hilco Engineering Co., Ganna City, Wis. (1, 3)  
 Keystone Mfg. Co., 23328 Sherwood Rd., Centerline, Detroit, Mich. (3)  
 Knight Electrical Products Corp., 168 Van Brunt St., Brooklyn 31, N. Y. (3)  
 Leibfried Mfg. Corp., C. H., 95-101 Guernsey St., Brooklyn 22, N. Y. (1)  
 Lim. Clyde W., 2323 W. 18 St., Chicago 8, Ill. (1, 3)  
 M. & W. Electric Mfg. Co., Inc., S. Walnut St. (P. O. Box 87), East Palestine, Ohio (1, 2)  
 Malleable Iron Fittings Co., Branford, Conn. (2)  
 McKinley Co., Ben P., 626 W. Jackson Blvd., Chicago 6, Ill. (3)  
 Metaltrics, Inc., 677 Broadway, N. Y. 12, N. Y. (1)

**• MIDWEST ELECTRIC MFG. CO.,** 1639 Walnut St., Chicago 12, Ill. (1)—ADV. PG. 104-105  
 Minerallac Electric Co., 25 N. Peoria St., Chicago 7, Ill. (1, 2)  
 National Electric Products Corp., Gateway Center, 140 Stamewix St., Pittsburgh 22, Pa. (3)  
 Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (2)  
 Palma Co., Fullerton Ave. & Westgate Rd., Addison, Ill. (1, 3)  
 Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (1, 2, 3)  
 Rattan Mfg. Co., 10 Wall St. (P. O. Box 1745), New Haven 7, Conn. (3)  
 Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa. (2)  
 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (3)  
 Simplet Electric Co., 5136 Park Ave., Sycamore, Ill. (1, 2, 3)  
**• STEEL CITY ELECTRIC CO.,** 1207 Columbus Ave., Pittsburgh 33, Pa. (1, 2, 3)—ADV. PG. 124  
 Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (1, 3)  
 Theplitt Mfg. Co., Gregg & Hammond Sts., Carnegie, Pa. (1)  
 Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J. (1)  
 Union Insulating Co., Inc., Box 351, Parkersburg, N. J. (1)

Unistrut Products Co., 1013 W. Washington Blvd., Chicago 7, Ill. (1)  
 Utilities Service Co., 1 Pine St., Allentown, Pa. (2)  
 Victor Specialties, 775 Main St., New Rochelle, N. Y. (1)  
 Western Wire Products Co., 1415-35 S. 18 St., St. Louis 4, Mo. (1)

#### HANGERS, Fixture

**1. Ball Joint**  
**2. Disconnecting**  
**3. Rigid**  
**4. Shock Absorbing**  
 Abolite Lighting Div., Jones Metal Products Co., West Lafayette, Ohio (2, 3, 4)  
 Adalet Mfg. Co., 14300 Lorain Ave., Cleveland 11, Ohio (1, 4)  
 American Steel & Iron Works, 5801 S. Lowe Ave., Chicago 21, Ill. (2, 3)  
 Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. (1, 2, 3, 4)  
 Art Metal Co., 1814 E. 40 St., Cleveland 3, Ohio (1)  
 Associated Lighting Service, 876 Kaynne St., Redwood City, Calif. (2, 3)  
 Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (1, 3)  
 Columbia Electric & Mfg. Co., North 2310 Fancher Way, Spokane, Wash. (3)  
**• CROUSE-HINDS CO.,** Syracuse 1, N. Y. (1, 3, 4)  
 —ADV. PG. 116-117  
 Curtis Lighting Inc., 6135 W. 65 St., Chicago 38, Ill. (3)  
 Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (1, 3)  
 Killark Electric Mfg. Co., 3940 Easton Ave., St. Louis 13, Mo. (3)  
 Leibfried Mfg. Corp., C. H., 95-101 Guernsey St., Brooklyn 22, N. Y. (3)  
 Multi Electric Mfg. Inc., 4223 W. Lake St., Chicago 24, Ill. (1, 4)  
 Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (1, 2, 3, 4)  
 Quadrangle Mfg. Co., 32 S. Peoria St., Chicago 7, Ill. (1, 2, 4)  
 Russell & Stoll Co., Inc., 125 Barclay St., New York 7, N. Y. (1, 3)  
 Simplet Electric Co., 5136 Park Ave., Sycamore, Ill. (1, 2, 3, 4)  
 Smithcraft Lighting Div., A. L. Smith Iron Co., 217 Everett Ave., Chelsea 50, Mass. (2, 3)  
 Smoot-Holman Co., P. O. Box 398, Inglewood, Calif. (1)  
**• STEEL CITY ELECTRIC CO.,** 1207 Columbus Ave., Pittsburgh 33, Pa. (3)—ADV. PG. 124  
 Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J. (2, 4)  
 Thompson Electric Co., 1101-11 Power Ave. N. E., Cleveland 14, Ohio (2)  
 Wakefield Co., 731 S. Water St., Vermillion, Ohio (1)

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 Wil-Son Mfg. Co., Cloverport, Ky. (2)  
 Williams Products Co., H. E., 106 S. Main St., Carthage, Mo. (3)  
 Yorkville Metal Products Co., 677 Broadway 12, N. Y. (1, 2, 3)  
**HARNES, Wiring**  
 Aiken-Reed Inc., 2802 Wollmer St., Mantowac, Wis.  
 American Phenolic Corp., 1830 S. 54th St., Chicago 50, Ill.  
 Beckley Electric Co., Inc., 468-470 Grand Ave., Brooklyn 38, N. Y.  
 Berkshire Electric Cable Co., Leeds, Mass.  
 Blackhawk Industries, 250 S. Main St., Dubuque, Iowa  
 Brand & Co., Inc., William, North & Valley Sts., Willimantic, Conn.  
 Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I.  
 Champion Cable Co., 1805 E. 40 St., Cleveland 3, Ohio  
 Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J.  
 Co-operative Industries, Inc., 100 Oakdale Rd., Chester, N. J.  
 Columbia Wire & Supply Co., 2850 Irving Park Rd., Chicago 18, Ill.  
 Cornish Wire Co., Inc., 50 Church St., N. Y. 7, N. Y.  
 Diamond Wire & Cable Co., 445 Park Ave., Syracuse, Ill.  
 Eastern Specialty Co., 3617 N. 8th St., Phila. 40, Pa.  
 Electric Auto-Lite Co., Wire and Cable Div., Port Huron, Mich.  
 Electro Devices, Inc., 4025 Easton Ave., St. Louis 13, Mo.  
 General Armature & Mfg. Co., P. O. Box 370, Lock Haven, Pa.  
 General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn.  
 General Products Corp., 107 Salem St., Union Springs, N. Y.  
 Haft & Sons, Inc., 950 Kent Ave., Brooklyn 5, N. Y.  
 Hallett Mfg. Co., 1601 W. Florence Ave., Inglewood, Calif.  
 Interstate Mfg. Corp., 26 Sterling St., East Orange, N. J.  
 Langwin Mfg. Corp., 37 W. 65 St., N. Y. 23, N. Y.  
 Lee Electric, Inc., 132 Beckwith Ave., Paterson, N. J.  
 Lloyd Products Co., 225 Chapman St., Providence 5, R. I.  
 Modelectric Products Co., 1500 Bangs Ave., Asbury Park, N. J.  
 Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla.  
 Packard Electric Div., General Motors Corp., Warren, Ohio  
 Peschel Electronics, Inc., 13 Garden St., New Rochelle, N. Y.  
 Plastic Wire & Cable Corp., E. Main St., Jewett City, Conn.  
 Protection Equipment Co., Inc., 2924 Emerson Ave., S. (P. O. Box 96, Lake St. Branch), Minneapolis 8, Minn.  
 Quick Charge, Inc., 1750 N. E. 10th St., Oklahoma City 4, Okla.  
 Riverside Mfg. & Electrical Supply Co., 10228 Michigan Ave., Dearborn, Mich.  
 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif.  
 Sittler Corp., 18 N. Ada St., Chicago 7, Ill.

# HEADS, Coil Winding

Crown Industrial Products Co., 713 Amsterdam St., Woodstock, Ill.  
 Insulation and Wires Inc., 3453 Chouteau Ave., St. Louis 3, Mo.  
 Potter & Rayfield, Inc., P. O. Box 1042, Atlanta, Ga.

# HEADS, Service Entrance—see MASTS AND HEADS

# HEATERS (Classified as to Design)

1. Cartridge
2. Finned
3. Glass-Covered
4. Induction
5. Infra-red
6. Ring
7. Screw-Base
8. Strip
9. Tubular

Acme Electric Heating Co., 1217 Washington St., Boston 18, Mass. (1, 8, 9)  
 Acra Electric Corp., 9901 Pacific Ave., Franklin Park, Ill. (1, 2, 8, 9)  
 Ajax Electrothermic Corp., Ajax Park, Trenton 5, N. J. (4)  
 Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (4)  
 Ambory Corp., 2132 Stephenson Highway, Hazel Park, Mich. (1)  
 Berko Electric Mfg. Corp., 212-40 Jamaica Ave., Queens Village 28, N. Y. (3, 5)  
 Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (7)  
 Circle Air Industries, Inc., 244 Herkimer St., Brooklyn 16, N. Y. (2)

Coates Electric Mfg. Co., 3419 - 11th Ave. S. W., Seattle 4, Wash. (2)  
 Connecticut Hard Rubber Co., Box 1911, New Haven 9, Conn. (3)  
 Cooper Co., D. C., 1467 S. Michigan Ave., Chicago 5, Ill. (7, 8)  
 Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (1, 4, 7, 8, 9)  
 Dalton Electric Heating Co., 11 Goodhue St., Salem, Mass. (1, 5, 9)  
 Doyle Co., J. E., 1220 W. 6th St., Cleveland 13, Ohio (5)  
 Dunham Co., C. A., 400 W. Madison St., Chicago 5, Ill. (2)  
 Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (5)  
 Electric Arc, Inc., 152 Jelliff Ave., Newark 8, N. J. (4)  
 Electric Furnace Co., W. Wilson St., Salem, Ohio (4)  
 Electric Heater Co., 45 Seymour St. (P. O. Box 188), Stratford, Conn. (8, 9)  
 Electromode Corp., 45 Crouch St., Rochester 3, N. Y. (2)  
 Falcon Equipment Co., 13th St., New Brighton, Pa. (1)  
 Fostoria Pressed Steel Corp., N. Main St., Fostoria, Ohio (5)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 4, 7, 8, 9)  
 HeatTube Corp., 612 Grand St., Allegan, Mich. (1, 2, 5, 7, 8, 9)  
 Heatmore, Inc., 59 Throop Ave., Brooklyn 6, N. Y. (5)  
 Industrial Engineering & Equip. Co., Inc., 711 S. Theresa, St. Louis 3, Mo. (1, 2, 8, 9)  
 Jackson Electrical Co., 900 W. Van Buren St., Chicago 7, Ill. (5)  
 Kas-Kel Electric Co., Inc., 5 Union Sq., N. Y. 3, N. Y. (5)  
 La Salle Products, Inc., 143 Seneca St., Buffalo, N. Y. (4, 5)  
 Lindberg Engineering Co., 2450 W. Hubbard St., Chicago 12, Ill. (4)  
 Lyon Rural Electric Co., 2075 Moore St., San Diego 12, Calif. (1, 6, 7, 8, 9)  
 Magnethermic Corp., P. O. Box H, Youngstown 7, Ohio (4)  
 Marion Electrical Instrument Co., 40 Canal St., Manchester, N. H. (4)  
 Markel Electric Products, Inc., 145 Seneca St., Buffalo 3, N. Y. (4, 5)  
 Miskella Infra-Red Co., E. 73rd & Grand Ave., Cleveland 4, Ohio (5)  
 Perfection Industries, Inc., 7609 Platt Ave., Cleveland 4, Ohio (5)  
 Pre-Fab Heater Co., 103 Boston St., Guilford, Conn. (3)  
 Pyrosil, Inc., 1889 Front St., Cuyahoga Falls, Ohio (5, 9)  
 Reeve Electronics, Inc., 609 W. Lake St., Chicago 6, Ill. (4)  
 Salton Mfg. Co., Inc., 29 Jumel Place, N. Y. 32, N. Y. (3)  
 Sherman Industrial Electronics Co., 505 Washington Ave., Belleville, N. J. (4)  
 Star Expansion Bolt Co., 147 Cedar St., N. Y. 6, N. Y. (2)  
 Thermobloc Div., Prat-Daniel Corp., 2 Meadow St., South Norwalk, Conn. (3)  
 Tocco Div., Ohio Crankshaft Co., 3800 Harvard Ave., Cleveland 1, Ohio (4)  
 Vulcan Electric Co., 88 Holten St., Danvers, Mass. (1, 2, 6, 7, 8, 9)  
 Waage Electric, Inc., 720 Colfax Ave., Kenilworth, N. J. (1, 2, 8, 9)  
 Watlow Electric Mfg. Co., 1376 Ferguson Ave., St. Louis 14, Mo. (1, 6, 8, 9)  
 Wells Mfg. Co., 220 Ninth St., San Francisco 3, Calif. (2, 9)  
 Wesix Electric Heater Co., 390 First St., San Francisco 5, Calif. (2, 5, 8, 9)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2, 4, 6, 8, 9)  
 ●WIEGAND CO., EDWIN L., 7637 Thomas Blvd., Pittsburgh 8, Pa. (1, 2, 5, 6, 7, 8, 9)—ADV. PG. 148

# HEATERS (Classified as to Usage)

1. Aquarium
2. Foot Mat
3. Forging
4. Immersion
5. Metal
6. Organ Chamber
7. Pipe Thawing
8. Plate
9. Rivet
10. Soil
11. Soldering
12. Tonk
13. Tool
14. Urn
15. Water Storage

Acme Electric Heating Co., 1217 Washington St., Boston 18, Mass. (4, 8, 12)  
 Acra Electric Corp., 9901 Pacific Ave., Franklin Park, Ill. (4, 5, 8, 12, 14, 15)  
 Aeroli Products Co., Inc., 69 Wesley St., South Hackensack, N. J. (7)  
 Ajax Electrothermic Corp., Ajax Park, Trenton 5, N. J. (5, 12)  
 Ambory Corp., 21321 Stephenson Highway, Hazel Park, Mich. (4)  
 Bellevue Industrial Furnace Co., 2620 Crane Ave., Detroit 14, Mich. (3, 5, 9, 11)  
 Cellheat, Inc., 5212 Homberg Drive, Knoxville, Tenn. (7)

Cheston Co., Frank C., 30 Church St., New York 7, N. Y. (3, 5, 9, 11)  
 Clark Div., McGraw Electric Co., 5201 W. 65 St., Chicago 38, Ill. (15)  
 Coates Electric Mfg. Co., 3419 - 11th Ave. S. W., Seattle 4, Wash. (4, 12, 15)  
 Connecticut Hard Rubber Co., Box 1911, New Haven 9, Conn. (5)  
 Cooper Co., D. C. 1467 S. Michigan Ave., Chicago 5, Ill. (4, 12)  
 Copper Boiler & Heater Works, 522 Jay St., Mantowac, Wis. (12, 15)  
 Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (4, 5, 7, 12, 15)  
 Dalton Electric Heating Co., 11 Goodhue St., Salem, Mass. (4, 5, 12, 13, 14, 15)  
 Electric Heater Co., 45 Seymour St. (P. O. Box 188), Stratford, Conn. (4, 12, 15)  
 Everwarm, Inc., 2717½ N. Central Ave., North, Knoxville, Tenn. (7, 10)  
 Falcon Equipment Co., 13th St., New Brighton, Pa. (4, 5, 8, 12)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (4, 12)  
 General Electric Co., Major Appliance Div., Appliance Park, Louisville, Ky. (15)  
 Gray & Dudley Co., 2300 Clifton Rd., Nashville 3, Tenn. (15)  
 HeatRite Inc., 311 Fifth Ave. North, Minneapolis 1, Minn. (15)  
 HeatTube Corp., 612 Grand St., Allegan, Mich. (3, 4, 5, 7, 8, 11, 12, 13, 14, 15)  
 Holland & Sons, Inc., J., 475 Keap St., Brooklyn 11, N. Y. (4)  
 Industrial Engineering & Equip. Co., Inc., 711 S. Theresa, St. Louis 3, Mo. (4, 6, 7, 12, 13, 14, 15)  
 International Electric Fence Co., Inc., 924 Albany St. (Box 252), Caldwell, Idaho (15)  
 Interstate Rubber Products Corp., 908 Avila St., Los Angeles 12, Calif. (2)  
 Jackson Mfg. Co., Inc., W. L., 1222 E. 40 St., Chattanooga, Tenn. (15)  
 Jackson Products Co., 3703 E. 93 St., Cleveland 5, Ohio (15)  
 Knelsley Electric Co., 2501-2509 Lagrange St., Toledo 3, Ohio (4)  
 Lectro Sealed Co., 12095 N. Burgard, Portland 3, Ore. (15)  
 Lyon Rural Electric Co., 2075 Moore St., San Diego 12, Calif. (4, 10, 11)  
 Magnethermic Corp., P. O. Box H, Youngstown 7, Ohio (5)  
 Malleable Iron Range Co., Beaver Dam, Wis. (15)  
 Marion Electrical Instrument Co., 400 Canal St., Manchester, N. H. (5, 11)  
 Miskella Infra-Red Co., E. 73rd & Grand Ave., Cleveland 4, Ohio (5)  
 Mor-Flo Heater Corp., 2176 E. 76 St., Cleveland 3, Ohio (15)  
 National Carbon Co., 30 E. 42 St., N. Y. 17, N. Y. (4)  
 Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla. (4, 5, 12)  
 National Steel Construction Co., Inc., 301 Water St., Logansport, Ind. (15)  
 Old Dominion Iron & Steel Corp., Belle Isle, Richmond 3, Va. (15)  
 Op-Al Electric & Mfg. Co., 809 N. Senate Ave., Indianapolis 2, Ind. (13)  
 Phillips Mfg. Co., Inc., 2816 Aldrich Ave. South, Minneapolis 8, Minn. (11)  
 Pre-Fab Heater Co., 103 Boston St., Guilford, Conn. (7, 10, 12)  
 Pyrosil, Inc., 1889 Front St., Cuyahoga Falls, Ohio (4)  
 Quick Charge, Inc., 1750 N. E. 10th St., Oklahoma City 4, Okla. (15)  
 Rex Electric Div., Cleveland Heater Co., 2310 Superior Ave., Cleveland 14, Ohio (15)  
 Robertson Co., L. N., 1539 E. 103 St., Seattle 5, Wash. (7, 10, 12, 13)  
 Sepco Corp., 860 Cross St., Pottstown, Pa. (15)  
 Siebring Mfg. Co., George, Iowa (4, 10, 12)  
 Smith-Gates Corp., Plainville, Conn. (4, 7, 10)  
 Thermador Electrical Mfg. Co., 5119 District Blvd., Los Angeles 22, Calif. (15)  
 Tocco Div., Ohio Crankshaft Co., 3800 Harvard Ave., Cleveland 1, Ohio (3, 5, 11)  
 Trindl Products, Ltd., 1807-11 S. Clark St., Chicago 16, Ill. (7)  
 United States Rubber Co., Electrical Wire and Cable Dept., 1230 Avenue of the Americas, New York 20, N. Y. (1, 4, 7, 12)  
 Vulcan Electric Co., 88 Holten St., Danvers, Mass. (12, 14, 15)  
 Waage Electric, Inc., 720 Colfax Ave., Kenilworth, N. J. (4, 7, 11, 12, 14, 15)  
 Wall Mfg. Co., P., P. O. Box 71, Grove City, Pa. (11)  
 Watlow Electric Mfg. Co., 1376 Ferguson Ave., St. Louis 14, Mo. (4, 13)  
 Wells Mfg. Co., 220 Ninth St., San Francisco 3, Calif. (4)  
 Wesix Electric Heater Co., 390 First St., San Francisco 5, Calif. (4, 5, 12, 14, 15)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (3, 4, 11, 12, 15)  
 ●WIEGAND CO., EDWIN L., 7637 Thomas Blvd., Pittsburgh 8, Pa. (4, 5, 7, 8, 10, 12, 13, 14, 15)—ADV. PG. 148  
 Wood Co., John, 100 Washington St., Conshohocken, Pa. (15)

# HEATERS, Space, Electric Forced Convection (Resistance Element in Air)

1. Bracket, Floor-Mounted or Pedestal Units, Commercial or Industrial

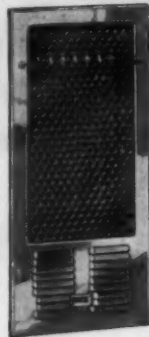
2. Bracket, Floor-Mounted or Pedestal Units, Residential
3. Ceiling Panels or Units
4. Explosion-Proof Units
5. Portable Units, Commercial or Industrial
6. Portable Units, Residential
7. Wall Panels or Units

Broan Mfg. Co., Inc. 1669 N. Water St., Milwaukee 2, Wis. (7)  
 Circle Air Industries, Inc. 244 Herkimer St., Brooklyn 16, N. Y. (1, 6, 7, 8, 9)  
 Coates Electric Mfg. Co. 3419-11th Ave. S. W., Seattle 4, Wash. (4, 5)  
 Cutler-Hammer, Inc. 229 N. 12th St., Milwaukee 1, Wis. (1)  
 Dominion Electric Corp., 130 Elm St., Mansfield, Ohio (6)  
 Doyle Co. J. E., 1220 W. 6th St., Cleveland 13, Ohio (4, 5)  
 Electromode Corp., 45 Crouch St., Rochester 3, N. Y. (1, 2, 4, 5, 6, 7)  
 Fresh-Air-Div. Cory Corp., 221 N. LaSalle St., Chicago 111, (6)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 3, 5)  
 Ig Electric Ventilating Co., 2850 N. Pulaski Rd., Chicago 41, Ill. (2, 7)  
 Industrial Engineering & Equip. Co., Inc., 711 S. Theresa, St. Louis 3, Mo. (1, 5)  
 International Oil Burner Co., Fan Div., 3800 Park Ave., St. Louis 10, Mo. (7)  
 Kilbury Mfg. Co., Inc. 14529 Hawthorne Blvd., Lawndale Calif. (1, 2)  
 Knapp-Monarch Co., Bent & Potomac, St. Louis 16, Mo. (2, 4, 5, 6)  
 La Salle Products, Inc., 143 Seneca St., Buffalo, N. Y. (2, 3, 4, 5, 6, 7)  
 Le John Mfg. Co., Inc., 111 Twenty-Second St., Huntington, W. Va. (6)  
 Lyon Rural Electric Co., 2075 Moore St., San Diego 12, Calif. (5)  
 Markel Electric Products, Inc., 145 Seneca St., Buffalo 3, N. Y. (2, 3, 4, 5, 6)  
 Minar Products, Inc., 138 Spencer St., Brooklyn 5, N. Y. (6)  
 Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla. (4)  
 Post-Glover Electric Co., 221 W. Third St., Cincinnati 2, Ohio (1)  
 Roberson Co., L. N., 1539 E. 103 St., Seattle 5, Wash. (1, 3)  
 Stebring Mfg. Co., George, Iowa (5)  
 Thermador Electrical Mfg. Co., 5119 District Blvd., Los Angeles 22, Calif. (5, 6, 7)  
 Titan Mfg. Co., Inc., 701 Seneca St., Buffalo 10, N. Y. (6, 7)  
 Vulcan Electric Co., 88 Holten St., Danvers, Mass. (5, 6)  
 Waage Electric, Inc., 720 Colfax Ave., Kenilworth, N. J. (5)  
 Wesix Electric Heater Co., 390 First St., San Francisco 5, Calif. (1, 2, 3, 4, 5, 7)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 5, 6, 7)  
 ●WIEGAND CO., EDWIN L., 7637 Thomas Blvd., Pittsburgh 8, Pa. (1, 2, 4, 5, 6, 7)—ADV. PG. 148

**HEATERS, Space, Electric**  
 Natural Convection (Resistance Element in Air)

1. Baseboard Panels or Units
2. Bracket, Floor-Mounted or Pedestal Units, Commercial or Industrial
3. Bracket, Floor-Mounted or Pedestal Units, Residential
4. Ceiling Panels or Units
5. Explosion-Proof Units
6. Floor Units, Recessed
7. Portable Units, Commercial or Industrial
8. Portable Units, Residential
9. Wall Panels or Units

Acme Electric Heating Co., 1217 Washington St., Boston 18, Mass. (2, 5, 7, 8)  
 Adam Electric Co., Frank, P. O. Box 357, St. Louis, Mo. (9)  
 American Electrical Appliance Corp., 1060 Washington Ave., Bronx 56, N. Y. (5, 6)  
 Armstrong Products Corp., 7th Ave. & 1st St., (P. O. Box 940), Huntington 12, W. Va. (6)  
 Berns Mfg. Corp., 3950 N. Rockwell St., Chicago, Ill. (8)  
 Cavalier Corp., Electric Heating Div., 343 W. First St., Chattanooga, Tenn. (1, 2, 3, 6, 7, 8, 9)  
 Can Arm Corp., P. O. Box 30, Chazy, N. Y. (1)  
 Circle Air Products, Inc., 244 Herkimer St., Brooklyn 16, N. Y. (1, 8, 9)  
 Coates Electric Mfg. Co., 3419-11th Ave. S. W., Seattle 4, Wash. (5)  
 Corning Glass Works, Corning, N. Y. (2, 9)  
 Dominion Electric Corp., 150 Elm St., Mansfield, Ohio (8)  
 Electrend Products Corp., St. Joseph 2, Mich. (8, 9)  
 Electromode Corp., 45 Crouch St., Rochester 3, N. Y. (1, 5, 9)  
 Electrovector, Inc., 1660 E. New York Ave., Brooklyn 21, N. Y. (1, 9)  
 Everwarm, Inc., 2717½ N. Central Ave., North, Knoxville, Tenn. (9)  
 Frigid, Inc., 128-168 32nd St., Brooklyn 32, N. Y. (8)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (2, 7)  
 Gold Car Heating & Lighting Co., 33-39th St., Brooklyn 32, N. Y. (2, 7, 9)  
 HeatTube Corp., 612 Grand St., Allegan, Mich. (5)  
 Industrial Engineering & Equip. Co., Inc., 711 S. Theresa, St. Louis 3, Mo. (2, 7)



**Extra Comfort and Convenience . . .  
 at LOW COST . . . are provided by the**

**BUILT-IN ELECTRIC  
 FAUQUIHETERS**

**with Built-in Control Switch or Thermostat**

Ideal for old or new homes, and other buildings. Requires only the flip of a switch to start operation. Available in single units of 1,000 and 1,500 watts and twin units of 2,000 and 3,000 watts; with built-in thermostat or separately mounted thermostatic control at additional charge.

**Frank Adam Electric Co.**

MAIN P. O. BOX 357

ST. LOUIS 3, MISSOURI

International Oil Burner Co., Fan Div., 3800 Park Ave., St. Louis 10, Mo. (1)  
 Jackson Mfg. Co., Inc., W. L., 1222 E. 40 St., Chattanooga, Tenn. (6)  
 La Salle Products, Inc., 143 Seneca St., Buffalo, N. Y. (3, 4, 9)  
 Lyon Rural Electric Co., 2075 Moore St., San Diego 12, Calif. (7)  
 Markel Electric Products, Inc., 145 Seneca St., Buffalo 3, N. Y. (3, 4, 8, 9)  
 Matthews Electric Heater Mfg. Co., Albertville, Ala. (6, 8, 9)  
 Meier Electric and Machine Co., Inc., 3525 E. Washington St., Indianapolis 7, Ind. (1, 7, 8, 9)  
 Post-Glover Electric Co., 221 W. Third St., Cincinnati 2, Ohio (2)  
 Thermador Electrical Mfg. Co., 5119 District Blvd., Los Angeles 22, Calif. (7, 8, 9)  
 Waage Electric, Inc., 720 Colfax Ave., Kenilworth, N. J. (7)  
 Wesix Electric Heater Co., 390 First St., San Francisco 5, Calif. (1, 2, 3, 4, 5, 6, 7, 8, 9)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 7)  
 ●WIEGAND CO., EDWIN L., 7637 Thomas Blvd., Pittsburgh 8, Pa. (1, 2, 3, 5, 6, 7, 8, 9)—ADV. PG. 148

**HEATERS, Space, Electric**

Natural Convection (Resistance Element in Steam or Hot Water Radiator)

1. Explosion-Proof Units
2. Floor-Mounted Units
3. Portable Units

Acme Electric Heating Co., 1217 Washington St., Boston 18, Mass. (1, 2, 3)  
 Burnham Corp., Box 351, Zanesville, Ohio (1, 2, 3)  
 Can Arm Corp., P. O. Box 30, Chazy, N. Y. (2, 3)  
 Coates Electric Mfg. Co., 3419-11th Ave. S. W., Seattle 4, Wash. (1)  
 Dunham Co., C. A., 400 W. Madison St., Chicago 6, Ill. (2)  
 Electric Steam Radiator Corp., 1 Electric Ave., Paris, Ky. (1, 3)  
 Frigid, Inc., 128-168 32nd St., Brooklyn 32, N. Y. (3)  
 HeatTube Corp., 612 Grand St., Allegan, Mich. (1)  
 Industrial Engineering & Equip. Co., Inc., 711 S. Theresa, St. Louis 3, Mo. (1)  
 Koral Electric Mfg. Co., 43-22 Van Dam St., Long Island City 1, N. Y. (2, 3)  
 Vulcan Electric Co., 88 Holten St., Danvers, Mass. (3)

**HEATERS, Space, Electric**  
 Radiant (Asbestos or Ceramic)

1. Baseboard Panels or Units
2. Ceiling Panels or Units
3. Portable Panels or Units
4. Wall Panels or Units

Acme Electric Heating Co., 1217 Washington St., Boston 18, Mass. (1)  
 Automatic & Precision Mfg. Co., 252 Hawthorne Ave., Yonkers 5, N. Y. (1, 5, 6)  
 Electromode Corp., 45 Crouch St., Rochester 3, N. Y. (1)  
 Heatmore, Inc., 59 Throop Ave., Brooklyn 6, N. Y. (1, 3, 4)  
 International Oil Burner Co., Fan Div., 3800 Park Ave., St. Louis 10, Mo. (1, 4)  
 La Salle Products, Inc., 143 Seneca St., Buffalo, N. Y. (3, 4)  
 Markel Electric Products, Inc., 145 Seneca St., Buffalo 3, N. Y. (3, 4)  
 NuTone, Inc., Madison & Red Bank Roads, Cincinnati 27, Ohio (2)  
 ThermoRay Corp., South Buckhout St., Irvington-on-Hudson, N. Y. (1, 3, 4)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 3)

**HEATERS, Space, Electric**  
 Radiant (Conductive Rubber)

Ambory Corp., 21321 Stephenson Highway, Hazel Park, Mich.  
 Connecticut Hard Rubber Co., Box 1911, New Haven 9, Conn.  
 General Electric Co., Construction Materials Div. 1285 Boston Ave., Bridgeport 2, Conn.

United States Rubber Co., Electrical Wire and Cable Dept., 1230 Avenue of the Americas, New York 20, N. Y.  
 United States Rubber Co., Mechanical Goods Div., 1230 Avenue of the Americas, New York 20, N. Y.

**HEATERS, Space, Electric**  
 Radiant (Glass)

1. Baseboard Panels or Units
2. Ceiling Panels or Units
3. Portable Panels or Units
4. Wall Panels or Units

Ambory Corp., 21321 Stephenson Highway, Hazel Park, Mich. (2, 3, 4)  
 Berko Electric Mfg. Corp., 212-40 Jamaica Ave., Queens Village 28, N. Y. (1, 2, 3, 4)  
 Can Arm Corp., P. O. Box 30, Chazy, N. Y. (1, 2, 3, 4)  
 Continental Radiant Glass Heating Corp., 1 E. 35 St., New York 16, N. Y. (1, 3, 4)  
 Corning Glass Works, Corning, N. Y. (4)  
 Crystalheat Co., P. O. Box 2275, Van Nuys, Calif. (1, 4)  
 Dixie Raydiant Electric Heat Corp., 66 Eleventh St., N.E., Atlanta 5, Ga. (1, 2, 3, 4)  
 Electrigras Corp., Newbridge & Windsor Rds., Bergenfield, N. J. (1, 2, 3, 4)  
 Infraglass Heater Co., Inc., 350 S. Sanford, Pontiac, Mich. (1, 3, 4)  
 Miskella Infra-Red Co., E. 73rd & Grand Ave., Cleveland 4, Ohio (3)  
 Salton Mfg. Co., Inc., 29 Jumel Place, N. Y. 32, N. Y. (2)

**HEATERS, Space, Electric**  
 Radiant (Heating Cable)

Ambory Corp., 21321 Stephenson Highway, Hazel Park, Mich.  
 Beckley Electric Co., Inc., 468-470 Grand Ave., Brooklyn 38, N. Y.  
 Cellheat, Inc., 5212 Homberg Drive, Knoxville, Tenn.  
 Electromode Corp., 45 Crouch St., Rochester 3, N. Y.  
 Everwarm, Inc., 2717½ N. Central Ave., North, Knoxville, Tenn.  
 General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn.  
 Meier Electric and Machine Co., Inc., 3525 E. Washington St., Indianapolis 7, Ind.  
 Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla.  
 Pan American Electronics Co., 308 Chestnut St., Nashville, Tennessee  
 Roberson Co., L. N., 1539 E. 103 St., Seattle 5, Wash.  
 Sunwarm, Inc., 2353 Johnson City Highway (Box 263), Kingsport, Tenn.  
 Vulcan Electric Co., 88 Holten St., Danvers, Mass.  
 Wesix Electric Heater Co., 390 First St., San Francisco 5, Calif.  
 ●WIEGAND CO., EDWIN L., 7637 Thomas Blvd., Pittsburgh 8, Pa.—ADV PG. 148

**HEATERS, Space, Electric**  
 Radiant (Resistance Element in Air)

1. Ceiling Panels or Units
2. Portable Panels or Units
3. Wall Panels or Units

Acme Electric Heating Co., 1217 Washington St., Boston 18, Mass. (1, 2)  
 Acra Electric Corp., 9901 Pacific Ave., Franklin Park, Ill. (1)  
 Ambory Corp., 21321 Stephenson Highway, Hazel Park, Mich. (1, 2, 3)  
 Cavalier Corp., Electric Heating Div., 343 W. First St., Chattanooga, Tenn. (3)  
 Carrier Corp., 300 S. Geddes St., Syracuse 1, N. Y. (3)

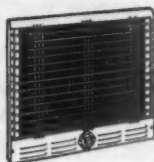
**HEATERS, Space, Electric**  
 Radiant (Infrared Lamp Fixtures)

Afco Lite Corp., 1234 N. Paulina St., Chicago 22, Ill.  
 Ambory Corp., 21321 Stephenson Highway, Hazel Park, Mich.  
 Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y.





## GLASS ELECTRIC RADIANT HEATING



Available in several models for wall mounting—with or without thermostatic control. Heating elements are tempered, heat-resistant glass with an electrically conductive coating bonded to the back surface. Silver strips bonded to edges of panel distribute current evenly over entire glass surface to provide completely uniform radiation.

Designed to operate without an initial surge of current, Berko Panels are efficient as well as economical. All models Underwriters' Laboratories and Canadian Standard approved. Every room can have individual thermostatic control. Available only through electrical wholesalers.

For complete information write

**BERKO ELECTRIC MANUFACTURING CORP.**

Dept EP-1, 212-40 Jamaica Avenue,  
Queens Village, 28, N. Y.

Fosteria Pressed Steel Corp., N. Main St., Fosteria, Ohio  
Markel Electric Products, Inc., 145 Seneca St., Buffalo 3, N. Y.  
Miskella Infra-Red Co., E. 73rd & Grand Ave., Cleveland 4, Ohio  
Overbagh & Ayres Mfg. Co., 411 S. Clinton St., Chicago 7, Ill.  
Pryne & Co., Inc., 140 N. Towne Ave. (P. O. Box 698), Pomona, Calif.  
Pyrosil, Inc., 1889 Front St., Cuyahoga Falls, Ohio  
Weldon Mfg. Co., 461-463 Broome St., New York 13 N. Y.  
Everwarm, Inc., 2717 1/2 N. Central Ave., North, Knoxville, Tenn. (3)  
Frigid, Inc., 128-168 32nd St., Brooklyn 32, N. Y. (2)  
La Salle Products, Inc., 143 Seneca St., Buffalo, N. Y. (1, 2, 3)  
Pre-Fab Heater Co., 103 Boston St., Guilford, Conn. (2)  
Pryne & Co., Inc., 140 N. Towne Ave. (P. O. Box 698), Pomona, Calif. (3)  
Vulcan Electric Co., 88 Holten St., Danvers, Mass. (2)  
Wesix Electric Heater Co., 390 First St., San Francisco 5, Calif. (1, 2, 3)  
●WIEGAND CO., EDWIN L., 7637 Thomas Blvd., Pittsburgh 6, Pa. (3)—ADV. PG. 148

### HEATERS, Space, Electric Combined with Lighting Fixture

Carrier Corp., 300 S. Geddes St., Syracuse 1, N. Y.  
Salton Mfg. Co., Inc., 29 Jumel Place, N. Y. 32, N. Y.

### HEATERS, Space, Electric For Heating and Air Conditioning Ducts

Acme Electric Heating Co., 1217 Washington St., Boston 18, Mass.  
Acra Electric Corp., 9901 Pacific Ave., Franklin Park, Ill.  
Carrier Corp., 300 S. Geddes St., Syracuse 1, N. Y.  
Coates Electric Mfg. Co., 3419 - 11th Ave. S. W., Seattle 4, Wash.  
Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis.  
Electromode Corp., 45 Crouch St., Rochester 3, N. Y.  
Ferro Electric Products Inc., Kirkland, Ill.  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
Gold Car Heating & Lighting Co., 33-35th St., Brooklyn 32, N. Y.  
HeatTube Corp., 612 Grand St., Allegan, Mich.  
Industrial Engineering & Equip. Co., Inc., 711 S. Theresa, St. Louis 3, Mo.  
Kilbury Mfg. Co., Inc., 14529 Hawthorne Blvd., Lawndale, Calif.  
Lyon Rural Electric Co., 2075 Moore St., San Diego 12, Calif.

Syntron Co., 690 Lexington Ave., Homer City, Pa.  
Waage Electric, Inc., 720 Colfax Ave., Kenilworth, N. J.  
Wesix Electric Heater Co., 390 First St., San Francisco 5, Calif.  
●WIEGAND CO., EDWIN L., 7637 Thomas Blvd., Pittsburgh 6, Pa.—ADV. PG. 148

### HEATERS, Space (Other than Electric)

1. Gas-Fired
2. Heat Pumps
3. Oil-Fired
4. Steam or Hot Water

Acme Industries, Inc., 620 N. Mechanic St., Jackson, Mich. (2)  
Aeroll Products Co., Inc., 69 Wesley St., South Hackensack, N. J. (1, 3, 4, 13)  
American Blower Corp., Detroit 32, Mich. (1, 4)  
American Coils Co., 360 Thomas St., Newark 5, N. J. (2)  
Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. (2)  
Armstrong Products Corp., 7th Ave. & 1st St., (P. O. Box 940), Huntington 12, W. Va. (1)  
Bell & Gossett Co., 8200 N. Austin Ave., Morton Grove, Ill. (4)  
Buffalo Forge Co., 490 Broadway, Buffalo 5, N. Y. (4)  
Circle Air Products, Inc., 244 Herkimer St., Brooklyn 16, N. Y. (4)  
Conco Engineering Works, Mendota, Ill. (1, 3)  
Copper Boiler & Heater Works, 522 Jay St., Manitowoc, Wis. (3, 4)  
Dearborn Stove Co., 1700 W. Commerce St., Dallas 2, Tex. (1)  
Dunham Co., C. A., 400 W. Madison St., Chicago 6, Ill. (1, 4)  
Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (4)  
General Electric Co., Air Conditioning Div., 5 Lawrence St., Bloomfield, N. J. (1, 2, 3)  
Hig Electric Ventilating Co., 2850 N. Pulaski Rd., Chicago 41, Ill. (1, 4)  
Inferno Co., 115 Ricou St., Shreveport, La. (1)  
International Oil Burner Co., Fan Div., 3800 Park Ave., St. Louis 10, Mo. (1, 3)  
Kilbury Mfg. Co., Inc., 14529 Hawthorne Blvd., Lawndale, Calif. (1)  
Lennox Furnace Co., Marshalltown, Iowa (3)  
Lonergan Mfg. Co., 704 Clark St., Albion, Mich. (1, 3)  
Master Vibrator Co., 1752 Stanley Ave. (P. O. Box 657), Dayton 1, Ohio (3)  
Murray Mfg. Co., D. J., 1002-24 Third St., Wausau, Wis. (4)  
Old Dominion Iron & Steel Corp., Belle Isle, Richmond 3, Va. (4)  
Perfection Industries, Inc., 7609 Platt Ave., Cleveland 4, Ohio (1, 3)

Preway Inc., 1430 Second St. North, Wisconsin Rapids, Wis. (1, 3)  
Quincy Stove Mfg. Co., 825 S. Front St., Quincy, Ill. (1, 3)  
Sleberg Mfg. Co., George, Iowa (1, 3, 4)  
Siegler Corp., Wilson Ave., Centralia, Ill. (1, 3)  
Star Expansion Bolt Co., 147 Cedar St., N. Y. 6, N. Y. (1, 4)  
Thermobloc Div., Pratt-Daniel Corp., 2 Meadow St., South Norwalk, Conn. (1, 3, 4)  
Trane Co., La Crosse, Wis. (1, 4)  
Typhoon Air Conditioning Co., Inc., 505 Carroll St., Brooklyn 15, N. Y. (2)  
United States Air Conditioning Corp., Como Ave. S. E. at 33rd, Minneapolis 14, Minn. (1)  
Vulcan Electric Co., 88 Holten St., Danvers, Mass. (4)  
Westinghouse Electric Corp., Sturtevant Div., Damon St., Hyde Park, Boston 36, Mass. (1, 4)

### HICKEYS, Fixture Hanging

1. Gas Sealing
2. Standard

Arrow Conduit & Fittings Corp., 129 30th St., Brooklyn 32, N. Y. (2)  
Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (2)  
Richards Co., J. R., P. O. Box 482, Carnegie, Pa. (2)  
Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (2)  
Steel City Electric Co., 1231 Columbus Ave., Pittsburgh 33, Pa. (2)  
Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J. (2)  
Williams Products Co., H. E., 106 S. Main St., Carthage, Mo. (2)

### HOISTS

1. Electric
2. Manual Chain
3. Pole Top

American Engineering Co., Aramingo Ave. & Cumberland St., Phila. 25, Pa. (1)  
Blackburn Corp., Jasper, 35 Madison St., St. Louis 6, Mo. (3)  
Chance Co., A. B., 210 N. Allen St., Centralia, Mo. (2, 3)  
Chester Hoist Div., National Screw & Mfg. Co., Lisbon, Ohio (1, 2)  
Chisholm-Moore Hoist Div., Columbus McKinnon Chain Corp., 6072 Fremont Ave., Tonawanda, N. Y. (1, 2)  
Cleveland Crane & Engineering Co., Wickliffe, Ohio (1, 2)  
Coffing Hoist Div., Duff-Norton Co., Danville, Ill. (1, 2, 3)

## linemen PREFER



the  
**"MIGHTY-MIDGET"**  
Puller

Because it's Powerful but Small, Light Pulls 500 lb. (with big factor of safety), yet is easily carried on lineman's belt, weighs but 6 1/4 lb. Compact enough to fit into a one-foot space.

Because it's Easy to Use, Fast The "Mighty-Midget" replaces heavy, complicated equipment. It is simple in design, simple to operate. Handle can be used either as a lever or a high-speed crank. Mere 28-lb pressure on handle pulls 500 lb. Ask your distributor for more information on the "Mighty-Midget" or write for Bulletin ELMP.

For Heavier Jobs—stretching heavy guys or cables, laying underground conduits, etc., use a "Safety-Pull" Ratchet Hoist. The 3/4-ton model weighs but 14 lb.—eight other models, handling up to 15 tons.



## Coffing Hoist Division

Duff-Norton Company • DANVILLE, ILL.

Hoist-Jacks, Load Binders, Differential Chain Hoists, Electric Hoists, Spur Geared Chain Hoists, Trolleys, Special Utility Maintenance Tools

CraneVeyor Corp., 1240 S. Boyle Ave., Los Angeles 23, Calif. (1, 2, 3)  
 Detroit Hoist & Machine Co., 8292 Morrow St., Detroit 11, Mich. (1)  
 Electro Lift, Inc., 204 Sargeant Ave., Clifton, N. J. (1)  
 Flood City Brass & Electric Co., Messenger & Elder Sts., Johnstown, Pa. (1)  
 Gillespie Co., Robert, Pine Street, Ware, Mass. (1, 2)  
 Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (2)  
 Joy Mfg. Co., Electrical Connector Div., 1201 Mackinaw Ave., St. Louis 10, Mo. (1)  
 Manning, Maxwell & Moore, Inc., Shaw-Box Crane & Hoist Div., Muskegon, Mich. (1, 2, 3)  
 Reading Crane & Hoist Corp., 2100 Adams St., Reading, Pa. (1, 2)  
 Republic Steel Corp., Chain Div., Broadway & Chalmers Rd., Cleveland 5, Ohio (2)  
 Robbins & Myers, Inc., 1345 Lagonda Ave., Springfield, Ohio (1, 2)  
 Rotary Lift Co., 1054 Kansas St., Memphis 2, Tenn. (1)  
 Round & Son, Inc., David, Box 883, Cleveland 22, Ohio (1, 2)  
 Self-Lifting Plann Truck Co., 423 N. Main St., Findlay, Ohio (3)  
 Shepard Niles Crane & Hoist Corp., Schuyler Ave., Montour Falls, N. Y. (1)  
 Silent Hoist & Crane Co., 841-63rd St., Brooklyn 20, N. Y. (1)  
 Spielert Elevator Corp., 245 W. Buttonwood St., Reading, Pa. (1, 2)  
 Utilities Service Co., 1 Pine St., Allentown, Pa. (2, 3)  
 Wright Hoist Div., American Chain & Cable Co., Inc., 1100 E. Princess St., York, Pa. (1, 2)  
 Yale Materials Handling Div., Yale & Towne Mfg. Co., Roosevelt Blvd. at Halderman Ave., Phila. 15, Pa. (1, 2)

#### HOISTS, Misc.

Cable—see **HOISTS, Electric**  
 Wire Rope—see **HOISTS, Electric**

#### HOLDERS

1. Battery
2. Brush
3. Cord
4. Fluorescent Lamp
5. Fuse, Cartridge, Low Voltage
6. Fuse, Plug
7. Shade
8. Welding

Airserco Mfg. Co., Inc., 435 Melwood St., Pittsburgh 13, Pa. (5)  
 Alden Products Co., 117 N. Main St., Brockton, Mass. (5)  
 Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (4, 7)  
 Bryant Electric Co., Box D. Barnum Station, Bridgeport 2, Conn. (4, 5, 6, 7)  
 Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (6)  
 Cam-Lok Div., Empire Products, Inc., 9051 Blue Ash Rd. (Box 98), Cincinnati 36, Ohio (8)  
 Champion Cable Co., 1805 E. 40 St., Cleveland 3, Ohio (1)  
 Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (4, 5, 6, 7)  
 Co-operative Utilities Co., Inc., 4637-39 Mulberry St., Phila. 24, Pa. (2)  
 Flower Mfg. Co., D. B., 1217 Spring Garden St., Phila. 23, Pa. (2)  
 General Electric Co., Trumbull Components Dept., 41 Woodford Ave., Plainville, Conn. (5)  
 Gets-A-Lite Co., 3865 N. Milwaukee Ave., Chicago 41, Ill. (4)  
 General Scientific Equipment Co., 27th & Huntingdon Sts., Phila. 32, Pa. (4)  
 Hughes Bros., Inc., Seward, Neb. (1)  
 Knox Porcelain Corp., 2706 Mynders Ave. (P. O. Box 2031), Knoxville 1, Tenn. (5, 7)  
 Kolton Electric Mfg. Co., 123 New Jersey Railroad Ave., Newark 5, N. J. (5)  
 Lincoln Electric Co., 22801 St. Clair Ave., Cleveland 17, Ohio (8)  
 Lloyd Products Co., 225 Chapman St., Providence 5, R. I. (4)  
 Midwest Electric Products, Inc., 1515 N. Front St., Mankato, Minn. (5, 6)  
 Pass & Seymour, Inc., Syracuse 9, N. Y. (7)  
 Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (5)  
 Quadrangle Mfg. Co., 32 S. Peoria St., Chicago 7, Ill. (7)  
 Safety Live Line Tool Co., 973 86th Ave., Oakland 21, Calif. (2, 5)  
 Seneger Standard Carbon Co., 291 Church St., New York 13, N. Y. (2)  
 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)  
 Spaulding Fibre Co., Inc., 310 Wheeler St., Tonawanda, N. Y. (5)  
 Utilities Service Co., 1 Pine St., Allentown, Pa. (5, 6)  
 Versabar Corp., 917 Communipaw Ave., Jersey City 6, N. J. (4)  
 Waveland Electric Co., 5542 N. Ashland Ave., Chicago 40, Ill. (2)  
 Wagner Mfg. Co., Inc., 350 W. Adams St., Jackson, Mo. (8)

#### HOLDERS, Misc.

Bit Extension—see **EXTENSIONS, Bit**  
 Color Screen—see **FIXTURES, Lighting, Special Purpose, Stage**  
 Spot or Floodlighting—see **FIXTURES, Lighting, Special Purpose**

#### HOLSTERS, Tool—see **POUCHES, Tool**

#### HOOKS

1. Guy, and Plates
2. Manhole Cover
3. Towing and Pinfle

Alhambra Foundry Co., Ltd., 1147 Meridian Ave., Alhambra, Calif. (2)  
 Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y. (2)  
 Brewer-Titchener Corp., 111 Port Watson St., Cortland, N. Y. (1)  
 Diamond Expansion Bolt Co., Inc., Garwood, N. J. (2)  
 Electrical Mfg. Co., Box 217, Battle Creek, Mich. (1)  
 Four Wheel Drive Auto Co., 105 E. 12 St., Clintonville, Wis. (3)  
 Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa. (1)  
 Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (1)  
 Kerlick Mfg. Co., 5600 Third St., San Francisco 24, Calif. (1, 2)  
 Leibfried Mfg. Corp., C. H., 95-101 Guernsey St., Brooklyn 22, N. Y. (1, 2)  
 Malleable Iron Fittings Co., Branford, Conn. (1)  
 Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (1, 2)  
 Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa. (1)  
 Utilities Service Co., 1 Pine St., Allentown, Pa. (1, 2)

#### HOOKS, Misc.

Ball—see **FITTINGS, Insulator; INSULATORS, Composition, High Voltage; INSULATORS, Glass; INSULATORS, Porcelain, High Voltage**  
 Cable—see **RACKS, Cable**  
 Cant—see **CANTHOOKS**  
 Lineman's—see **CLIMBERS, Pole**  
 Log—see **POLES, Pike**

#### HOOKSTICKS

Bodendieck Tool Co., 325 E. Main St., Taylorville, Ill.  
 Electrical Engineers Equipment Co., 25th Ave., & Division St., Melrose Park, Ill.  
 Memco Engineering & Mfg. Co., Inc., Commack, L. I., N. Y.  
 Powercraft Corp., 2215 De Kalb St., St. Louis 4, Mo.  
 Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa.  
 S & C Electric Co., 4435 Ravenswood Ave., Chicago 40, Ill.  
 Safety Live Line Tool Co., 973 86th Ave., Oakland 21, Calif.  
 Southern Electrical Equipment Co., 306 W. Bland St., Charlotte 3, N. C.  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.

#### HORNS, Arcing—see **FITTINGS, Insulator; INSULATORS, Composition, High Voltage; INSULATORS, Glass; INSULATORS, Porcelain, High Voltage**

#### HORNS, Hazardous Location—see **BELLS, Hazardous Location**

#### HORNS, Signal

Auth Electric Co., Inc., 34-20 43th St., L. I. C. 1, N. Y.  
 Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill.  
 Cooper Co., Inc., Clark, 317 N. Market St., Palmyra, N. J.  
 Cooper Hewitt Electric Co., 720-732 Grand St., Hoboken, N. J.  
 Couch Co., Inc., S. H., 9 Arlington St., North Quincy 71, Mass.  
 ● **CRUISE-HINDS CO., Syracuse 1, N. Y.—ADV. PG. 116-117**  
 Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa.  
 Federal Sign & Signal Corp., 8726 S. State St., Chicago 19, Ill.  
 International Business Machines Corp., 590 Madison Ave., N. Y. 22, N. Y.  
 LaBour Co., Inc., 1607 Sterling Ave., Elkart, Ind.  
 National Time & Signal Corp., 21800 Wyoming Ave., Detroit 37, Mich.  
 Patrick & Wilkins Co., 91 N. Seventh St., Phila. 6, Pa.  
 Signal Engineering & Mfg. Co., Branchport Ave., Long Branch, N. J.  
 Simplex Time Recorder Co., Alice St., Gardner, Mass.  
 Spertl Faraday, Inc., 1322 E. Church St., Adrian, Mich.

#### HOUSINGS, Cable Splice—see **SPLICES**

#### HOUSES, Lamp—see **FIXTURES, Lighting, Special Purpose, Stage**

#### HOUSINGS, Equipment—see **ENCLOSURES**

#### HOUSINGS, Instrument Mounting—see **STRUCTURES, Mounting, Instrument**

#### HOWLERS, Industrial—see **HORNS, Signal**

#### HUMIDIFIERS

Air & Refrigeration Corp., 439 Madison Ave., New York City, N. Y.  
 American Blower Corp., Detroit 32, Mich.  
 Bahmon Co., 1001 S. Marshall St., Winston-Salem, N. C.  
 Barth Corp., 12650 Brookpark Rd., Cleveland 30, Ohio  
 Carrier Corp., 300 S. Geddes St., Syracuse 1, N. Y.  
 Electric Hotpack Co., Inc., Cottman Ave. at Melrose St., Phila. 35, Pa.  
 Freshend-Aire Div., Cory Corp., 221 N. LaSalle St., Chicago, Ill.  
 Kauffman Air Conditioning Co., 4505 Olive St., St. Louis, Mo.  
 Lennox Furnace Co., Marshalltown, Iowa  
 Lyon Rural Electric Co., 2075 Moore St., San Diego 12, Calif.  
 Viking Air Conditioning Div., National Radiator Co., 5603 Walworth Ave., Cleveland 2, Ohio  
 Walton Laboratories, Inc., 1186 Grove St., Irvington 11, N. J.

#### HUSKS, Candle—see **SOCKETS, Candle**

#### HYDROMETERS, Battery

Gem Electric Mfg. Co., Inc., 237 37th St., Brooklyn, N. Y.  
 General Scientific Equipment Co., 27th & Huntingdon Sts., Phila. 32, Pa.  
 Precision Thermometer & Instrument Co., 1434 Brandywine St., Philadelphia 30, Pa.  
 Victor Instrument Mfg. Co. Inc., 33 W. 60 St., N. Y. 23, N. Y.

#### HYGROMETERS—see **INDICATORS, Moisture Content**

#### HYGROSTATS—see **CONTROLS, Humidity**

I

#### IMPREGNATORS, Coil

Aiken-Reed Inc., 2802 Wollmer St., Mantolow, Wis.  
 Potter & Rayfield, Inc., P. O. Box 1042, Atlanta, Ga.  
 Stokes Machine Co., F. J., 5500 Tabor Rd. (Onley P. O.), Phila. 20, Pa.

#### INCREASERS, Socket—see **ADAPTERS, Screw Socket**

#### INDICATORS

1. Blown Fuse
2. Dew Point
4. Moisture Content
3. Dry Bin Level
5. Phase Sequence
6. Quality Control
7. Radiation
8. Smoke Density

Airserco Mfg. Co., Inc., 435 Melwood St., Pittsburgh 13, Pa. (5)  
 Amthor Testing Instrument Co., Inc., 45 Van Sinderen Ave., Brooklyn 7, N. Y. (6)  
 Anton Electronic Laboratories, Inc., 1226 Flushing Ave., Brooklyn, N. Y. (7)  
 Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland 10, Ohio (8)  
 Bin-Dicator Co., 13946 Kercheval Ave., Detroit 15, Mich. (3)  
 Bristol Co., Waterbury 20, Conn. (2, 8)  
 Brush Electronics Co., 3405 Perkins Ave., Cleveland 14, Ohio (6)  
 Convalr, Inc., P. O. Box 9671, Pittsburgh 16, Pa. (3)  
 Doelcam Div., Minneapolis-Honeywell Reg. Co., 1400 Soldiers Field Rd., Boston 35, Mass. (6)  
 Electrical Facilities, Inc., 4224 Holden St., Oakland 8, Calif. (5)  
 Electronics Corp. of America, 77 Broadway, Cambridge 42, Mass. (8)  
 Ess Instrument Co., 96 S. Washington Ave., Bergenfield, N. J. (3, 8)  
 Fielden Instrument Div., Robertshaw-Fulton Controls Co., 2920 N. Fourth St., Phila. 33, Pa. (3, 4)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 4, 5, 6, 7, 8)  
 Golden Co., 1544 W. Glenoaks Blvd., Glendale 1, Calif. (7)  
 Hewitt-Robins, Inc., 666 Glenbrook Rd., Stamford, Conn. (3)  
 Illinois Testing Laboratories, Inc., 420 N. LaSalle St., Chicago 10, Ill. (2)  
 Langevin Mfg. Corp., 37 W. 65 St., N. Y. 23, N. Y. (1)  
 Peschel Electronics, Inc., 13 Garden St., New Rochelle, N. Y. (6)  
 Photobell Co., 43 Vesey St., New York 7, N. Y. (3, 4, 8)  
 Scam Instrument Corp., 3909 Irving Park Rd., Chicago 18, Ill. (3)

Sell Electric Co., H. H., 3240 Dakota Ave., Minneapolis 16, Minn. (5)  
 Starrett Co., L. S., 50 Crescent St., Athol, Mass. (6)  
 Sticht Co., Inc., Herman H., 27 Park Place, New York 7, N. Y. (3)  
 Superior Fuse & Mfg. Co., Inc., 221 Hudson St., Hoboken, N. J. (1)  
 Syntro Co., 690 Lexington Ave., Homer City, Pa. (3)  
 United Mfg. Co., 41 Haig St., Hamden 14, Conn. (5)  
 Walton Laboratories, Inc., 1186 Grove St., Irvington 11, N. J. (4)  
 Western Electro-Mechanical Co. Inc., 300 Broadway, Oakland 7, Calif. (5)  
 Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark 5, N. J. (4)  
 Wing Mfg. Co., L. J., Linden, N. J. (1)

#### INDICATORS, Misc.

**Air Flow**—see **SWITCHES, Control, Automatic Air Flow Controlled**  
**Eloped Time**—see **METERS, Time Recording**  
**Remote Control**—see **MOTORS, Self-Synchronizing**  
**Speed**—see **TACHOMETERS**  
**Surge**—see **RECORDERS, Voltage Surge**  
**Synchronism**—see **SYNCHROSCOPES**  
**Temperature**—see **PYROMETERS; THERMOMETERS**  
**Transformer Load**—see **THERMOMETERS, Transformer**  
**Transformer Oil Level**—see **GAGES, Transformer Oil Level**

#### INDUCTANCES

**1. High Frequency**  
**2. Standard Unit**  
 Ajax Electrothermic Corp., Ajax Park, Trenton 5, N. J. (1)  
 Cambridge Thermionic Corp., 445 Concord Ave., Cambridge 38, Mass. (1, 2)  
 Freed Transformer Co., Inc., 1718 Weirfield St., Brooklyn 27, N. Y. (1, 2)  
 General Radio Co., 275 Massachusetts Ave., Cambridge 39, Mass. (2)  
 Jeffries Transformer Co., 1710 E. 57 St., Los Angeles 58, Calif. (2)  
 Johnson Co., E. F., Waseca, Minn. (1)  
 Philco Corp., Tieg & C. Sts., Phila. 34, Pa. (1)  
 Thordarson-Meisner Mfg. Div., Maguire Industries, Inc., Seventh & Belmont Sts., Mt. Carmel, Ill. (1, 2)  
 United States Electronics Corp., 275 Warren St., Lyndurst, N. J. (1, 2)

#### INHIBITORS—see COMPOUNDS, Rust and Corrosion Preventive

#### INSERTS, Concrete

American Steel & Iron Works, 5801 S. Lowe Ave., Chicago 21, Ill.  
 Holub Industries, Inc., 442 Elm St., Sycamore, Ill.  
 Howard Electric, 1700 N. Kostner Ave., Chicago 39, Ill.  
 Johnson Co., E. F., Waseca, Minn.  
 Leibfried Mfg. Corp., C. H., 95-101 Guernsey St., Brooklyn 22, N. Y.  
 Star Expansion Bolt Co., 147 Cedar St., N. Y. 6, N. Y.  
 ● **STEEL CITY ELECTRIC CO.**, 1207 Columbus Ave., Pittsburgh 33, Pa.—ADV. PG. 124  
 Super-Grip Anchor Bolt Co., Inc., 3333 N. 22 St., Phila. 40, Pa.  
 Truscon Steel Div., Republic Steel Corp., Albert St., Youngstown 1, Ohio  
 Wahlund Mechanical Laboratory, M. Paul, P. O. Box 16, Grant, Iowa

#### INSTRUMENTS—see METERS; DETECTORS; RECORDERS; TESTERS

#### INSULATION

**1. Fiber Glass**  
**2. Plastic**  
**3. Quartz**  
**4. Silicone**  
**5. Steatite and Lava**  
**6. Textiles**  
 Adalet Mfg. Co., 14300 Lorain Ave., Cleveland 11, Ohio (2)  
 American Lava Corp., Cherokee Blvd. & Mrs. Rd., Chattanooga 5, Tenn. (5)  
 Auburn Mfg. Co., Pease Ave. & Stack St., Middletown, Conn. (1, 2, 4)  
 Brand & Co., Inc., William North & Valley Sts., Willimantic, Conn. (2, 4)  
 Brand Dielectrics, Inc., 57 North St., Willimantic, Conn. (1, 4)  
 Centralab Div., Globe-Union Inc., 900 E. Keefe Ave., Milwaukee 1, Wis. (5)  
 Connecticut Hard Rubber Co., Box 1911, New Haven 9, Conn. (4)  
 Continental-Diamond Fibre Co., Newark, Del. (1, 2, 4)  
 ● **COTTRELL PAPER CO., INC.**, 88 Purchase St., Fall River, Mass.—(1) ADV. PG. 118  
 Crane Packing Co., 1800 Cuyler Ave., Chicago 13, Ill. (2)  
 Dow Corning Corp., P. O. Box 592, Midland, Mich. (4)  
 Du-Co Ceramics Co., Main St. Extension (Box 144), Saxenburg, Pa. (5)

Electra Insulation Corp., 33-30 57th St., Woodside 77, N. Y. (6)  
 Electrical Refractories Co., 1900 E. Clark St., East Palestine, Ohio (5)  
 Fluorocarbon Products Div., United States Gasket Co., 602 N. 10 St. (P. O. Box 93), Camden 1, N. J. (2)  
 Frenchtown Porcelain Co., 9 Muirhead Ave., Trenton, N. J. (5)  
 General Electric Co., Chemical & Metallurgical Div., Pittsfield, Mass. (2, 4)  
 Glasco Corp., 1823 E. 40 St., Cleveland 3, Ohio (1, 2, 4)  
 Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo. (1, 4)  
 Irvington Varnish and Insulator Div., Minnesota Mining and Mfg. Co., 6 Argyle Terrace, Irvington 11, N. J. (1, 2, 4)  
 Johns-Manville, 22 E. 40 St., New York 16, N. Y. (2, 6)  
 Keystone Electronics Corp., 423 Broome St., New York 13, N. Y. (2)  
 Kirchberger & Co., Inc. M., 83-91 W. Forest Ave., Englewood, N. J. (5)  
 L. O. F. Glass Fibers, Inc., 1810 Madison Ave., Toledo 1, Ohio (1)  
 Lapp Insulator Co., Inc., 35 Gilbert St., Leroy, N. Y. (5)  
 Maryland Lava Co., Box 205, Bel Air, Md. (2, 3, 5)  
 Mica Insulator Co., P. O. Box 1076, Schenectady 1, N. Y. (1, 2, 4)  
 Mitchell Rand Insulation Co., 51 Murray St., N. Y. 7, N. Y. (1, 2, 4)  
 Molded Insulation Co., 335 E. Price St., Phila. 44, Pa. (1, 2)  
 Mycalex Corp. of America, 125 Clifton Blvd., Clifton, N. J. (1)  
 National Electric Coil Co., 800 King Ave., Columbus 16, Ohio (1, 4)  
 ● **NATVAR CORP.**, 211 Randolph Ave., Woodbridge, N. J. (1, 2, 4)—ADV. PG. 135  
 Panelyte Div., St. Reois Paper Co., 230 Park Ave., N. Y. 17, N. Y. (2, 4)  
 Penn Fibre & Specialty Co., Inc., 2024 E. Westmoreland St., Phila. 34, Pa. (2)  
 Plasticraft Products Co., 1 Station Plaza, West Nyack, N. Y. (2, 4)  
 Plymouth Rubber Co., Inc., 23 Revere St., Canton, Mass. (2)  
 Polyken Products Dept., Kendall Co., 222 W. Adams St., Chicago 6, Ill. (2)  
 Polymer Corp. of Pa., Reading, Pa. (2)  
 Pyrosil, Inc., 1889 Front St., Cuyahoga Falls, Ohio (3)  
 Resistoflex Corp., 39 Plattsford St., Belleville 9, N. J. (2)  
 Rogers Corp., Rogers, Conn. (1, 2)  
 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)  
 Silicone Insulation, Inc., 567 Third Ave., New York 16, N. Y. (2)  
 Spaulding Fibre Co., Inc., 310 Wheeler St., Tonawanda, N. Y. (1, 2)  
 Standard Asbestos Mfg. Co., 860 W. Evergreen Ave., Chicago 22, Ill. (1)  
 Star Porcelain Co., Muirhead Ave., Trenton 9, N. J. (5)  
 Stupakoff Ceramic & Mfg. Co., Latrobe, Pa. (5)  
 Sulfex Corp., 33-40 57th St., Woodside 77, N. Y. (1)  
 Synthane Corp., Oaks, Pa. (1)  
 Taylor Fibre Co., Norristown, Pa. (2, 4)  
 Vaco Products Co., 317 E. Ontario St., Chicago 11, Ill. (2)  
 Varflex Corp., 506 W. Court St., Rome, N. Y. (4)  
 Wilmington Fibre Specialty Co., New Castle, Dela. (2)

#### INSULATION, Misc.

**Asbestos**—see **ASBESTOS**  
**Fiber**—see **FIBER, Vulcanized**  
**Hard Rubber**—see **RUBBER, Hard**  
**Mica**—see **MICA**  
**Paper**—see **CAMBRIC; PAPER**  
**Refractory**—see **CORES, Refractory**  
**Tubular**—see **TUBES and TUBING, Flexible Insulating**  
**Varnished**—see **CAMBRIC**

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**4. Porcelain, Low Voltage**  
**5. Spool Type**  
**6. Strain**  
**7. Strain, Wood**  
**8. Tree**

● **BLACKHAWK INDUSTRIES**, 250 S. Main St., Dubuque, Iowa (4)—ADV. PG. 97  
 Buchanan Electrical Products Corp., 237 U. S. Route 22, Hillside, N. J. (1)  
 Cambridge Thermionic Corp., 445 Concord Ave., Cambridge 38, Mass. (3, 4)  
 Centralab Div., Globe-Union Inc., 900 E. Keefe Ave., Milwaukee 1, Wis. (3, 4, 5, 6)  
 Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (4)  
 Delta-Star Electric Div., H. K. Porter Co., Inc., 2437 Fulton St., Chicago 12, Ill. (1, 3, 5)  
 Du-Co Ceramics Co., Main St. Extension (Box 144), Saxenburg, Pa. (3, 4, 5, 6)  
 Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa. (1, 3, 4, 6)  
 Electrical Engineers Equipment Co., 25th Ave. & Division St., Melrose Park, Ill. (3)  
 Electrical Refractories Co., 1900 E. Clark St., East Palestine, Ohio (4, 5)

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 Frenchtown Porcelain Co., 9 Muirhead Ave., Trenton, N. J. (3, 4)  
 General Electric Co., Chemical & Metallurgical Div., Pittsfield, Mass. (1)  
 General Electric Co., Locks Dept., P. O. Box 57, Baltimore 3, Md. (2, 3, 4, 5, 6)  
 Glastic Corp., 1823 E. 40 St., Cleveland 3, Ohio (1)  
 Hughes Bros., Inc., Seward, Neb. (7, 8)  
 Illinois Electric Porcelain Co., 510 N. Pearl St., Macomb, Ill. (3, 4, 5, 6)  
 Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (2, 3, 4, 5, 6, 7, 8)  
 Kimble Glass Co., Box 1035, Toledo 1, Ohio (2)  
 Knox Porcelain Corp., 2706 Mynders Ave. (P. O. Box 2031), Knoxville 1, Tenn. (2, 3, 4, 5, 6)  
 Lapp Insulator Co., Inc., 35 Gilbert St., Leroy, N. Y. (3, 4, 5, 6, 8)  
 Lancaster Lens Co., Lancaster, Ohio (2)  
 Line Material Co., 700 W. Michigan St., Milwaukee, Wis. (3, 4, 5, 6)  
 Lin. Clyde W., 2323 W. 10 St., Chicago 8, Ill. (4, 5, 6)  
 M. & W. Electric Mfg. Co., Inc., S. Walnut St. (P. O. Box 87), East Palestine, Ohio (4)  
 Maryland Lava Co., Box 205, Bel Air, Md. (4, 5, 7)  
 Mycalex Corp. of America, 125 Clifton Blvd., Clifton, N. J. (1)  
 New Jersey Porcelain Co., Inc., Plum St. & N. Y. Ave. (P. O. Box 908), Trenton 5, N. J. (4)  
 Ohio Brass Co., 380 N. Main St., Mansfield, Ohio (3, 4, 5, 6, 7)  
 Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (2, 3, 5, 6, 7)  
 Porcelain Products, Inc., P. O. Box 300, Findlay, Ohio (3, 4, 5, 6, 8)  
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 Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa. (3, 4, 5)  
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 Saxonburg Ceramics, P. O. Box 100, Saxonburg, Pa. (4)  
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 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)  
 Silicone Insulation, Inc., 567 Third Ave., New York 16, N. Y. (1, 5)  
 Spero Electric Corp., 20500 St. Clair Ave., Cleveland 17, Ohio (4)  
 Star Porcelain Co., Muirhead Ave., Trenton 9, N. J. (4)  
 Superior Porcelain Co., 931 1/2 Market St., Parkersburg, W. Va. (4, 5, 6, 8)

Taylor Fibre Co., Narristown, Pa. (1)  
 Thomas & Sons Co., R., Lisbon, Ohio (3, 4, 5, 6)  
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 Victor Insulators Div., I-T-E Circuit Breaker Co., Victor, N. Y. (3, 4, 5, 6)  
 Weiss and Biheller Merchandise Corp., 584 Broadway, N. Y. 12, N. Y. (1, 4)

## INSULATORS, Misc.

Busbar—see SUPPORTS, Busbar  
 Cable Joint—see SPLICES, Line  
 High Voltage Switch—see SUPPORTS, Busbar  
 Knockout—see BUSHINGS, Conduit, Knockout  
 Porcelain Bead—see BEADS, Insulating  
 Tree Wire—see GUARDS, Pole Line, Tree Wire  
 Vibration—see BASES, Vibration Insulating

## INTERCOMMUNICATORS—see SYSTEMS, Communicating

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 Rowan Controller Co., 2315 Homewood Ave., Baltimore 18, Md.  
 Spedel Elevator Corp., 245 W. Buttonwood St., Reading, Pa.  
 Superior Appliance Co., 73-39 Central Ave., Glendale 27, N. Y.

## IONIZERS—see GENERATORS, Ozone

## INVERTERS—see RECTIFIERS, Vibration Power Supply; CONVERTERS, Synchronous

## IRONERS

Ambory Corp., 21321 Stephenson Highway, Hazel Park, Mich.  
 Armstrong Products Corp., 7th Ave. & 1st St., (P. O. Box 940), Huntington 12, W. Va.  
 Barton Corp., P. O. Box 279, West Bend, Wis.  
 Haertel Co., Walter, 2840 4th Ave. So., Minneapolis, Minn.  
 Hotpoint Co., 5600 W. Taylor St., Chicago 44, Ill.  
 Speed Queen Corp., Ripon, Wis.

## IRONS, Branding—see BRANDERS

## IRONS, Electric

**1. Sealing**  
**2. Soldering**  
 Acme Electric Heating Co., 1217 Washington St., Boston 18, Mass. (1, 2)  
 American Electrical Heater Co., 6110 Cass Ave., Detroit 2, Mich. (2)  
 Electric Soldering Iron Co., Inc., West Elm St., Deerp River, Conn. (2)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (2)  
 Hexacon Electric Co., 161 W. Clay Ave., Roselle Park, N. J. (1, 2)  
 Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill. (2)  
 Kwikheat Mfg. Co., 3732 San Fernando Rd., Glendale 4, Calif. (2)  
 Lenk Mfg. Co., 30 Cummington St., Boston 15, Mass. (2)  
 Linde Air Products Co., 30 E. 42 St., N. Y. 17, N. Y. (2)  
 Luma Electric Equipment Co., 1607 Coining Drive (P. O. Box 132), Toledo, Ohio (2)  
 Mitchell Industries Inc., Box 17, Municipal Airport, Mineral Wells, Tex. (2)  
 National Specialties Co., Inc., 1902 Howell St., Ft. Wayne 7, Ind. (2)  
 Phillips Mfg. Co., Inc., 2816 Aldrich Ave. South, Minneapolis 8, Minn. (2)  
 St. John Engineering Co., 4131 Lankershim Blvd., North Hollywood, Calif. (2)  
 Snap-On Tools Corp., 8028-28th Ave., Kenosha, Wis. (2)  
 Stanley Electric Tools, 436 Myrtle St., New Britain, Conn. (2)  
 Vemaline Products Co., P. O. Box 222, Hawthorne, N. J. (2)  
 Wall Mfg. Co., P. O. Box 71, Grove City, Pa. (2)  
 Weller Electric Corp., 808 Packer St., Easton, Pa. (1, 2)  
 Wells Mfg. Co., 220 Ninth St., San Francisco 3, Calif. (1)

## IRONS, Electric—see also SOLDERING MACHINES

## IRONS, Pulling-In, Manhole

Alhambra Foundry Co., Ltd., 1147 Meridian Ave., Alhambra, Calif.  
 Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y.  
 Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif.  
 Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa.  
 Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa.

## ISOLATORS, Vibration—see BASES, Vibration Insulating

## JACKS

1. Cable Reel
2. Lifting
3. Pipe Pushing
4. Pole Pulling
5. Pump, Motor-Driven

Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y. (1)  
 Blackhawk Mfg. Co., 5325 W. Rogers, Milwaukee 46, Wis. (2, 3)  
 Cope, Inc., T. J., 711 S. 50 St., Phila. 43, Pa. (1)  
 Duff-Norton Co., 2709 Preble Ave. (P. O. Box 1889), Pittsburgh 30, Pa. (1, 2, 3, 4)  
 Flint & Walling Mfg. Co., Inc., 95 Oak St., Kendallville, Ind. (5)  
 Hykon Mfg. Co., 163 E. State St. (P. O. Box 923), Alliance, Ohio (1)  
 Illinois Iron & Bolt Co., Carpentersville, Ill. (1, 2)  
 Ironbound Box & Lumber Co., 42 Hoffman Place, Hillside, N. J. (2)  
 Lewis-Shepard Products, Inc., 125 Walnut St., Watertown, Mass. (1, 2)  
 Revolver Co., 86th St. & Tonelle Ave., Route 1 & 9, North Bergen, N. J. (1)  
 Rotary Lift Co., 1054 Kansas St., Memphis 2, Tenn. (2)  
 Safety Live Line Tool Co., 973 86th Ave., Oakland 21, Calif. (4)  
 Swett Iron Works, A. L., 166 Glenwood Ave., Medina, N. Y. (1, 2)  
 Templeton, Kemly & Co., Gardner Rd., Broadview, Ill. (1, 2, 3, 4, 5)

## JACKS, Telephone, Wall Receptacle

Alden Products Co., 117 N. Main St., Brockton, Mass.  
 Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I.  
 Columbia Industries, Inc., Columbia, Pa.  
 Connecticut Telephone & Electric Corp., 70 Britannia St., Meriden, Conn.  
 Couch Co., Inc., S. H., 3 Arlington St., North Quincy 71, Mass.  
 Frigidaire Div., General Motors Corp., 300 Taylor St., Dayton 1, Ohio  
 General Control Co., 1200 Soldiers Field Rd., Boston 34, Mass.  
 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif.  
 Steel Co., Herman D., 225 Lafayette Bldg., Phila. 6, Pa.

## JEWELS, Bearing—see BEARINGS, Jewel

## JOINTS, Expansion

1. Bus
2. Conduit

Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa. (1)  
 Anderson Brass Works, Inc., P. O. Drawer 2151, Birmingham 1, Ala. (1)  
 BullDog Electric Products Co., 7610 Joseph Campau, Detroit, Mich. (1)  
 Crouse-Hinds Co., Syracuse 1, N. Y. (2)  
 Federal Pacific Electric Co., 50 Paris St., Newark 5, N. J. (1)  
 Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (2)  
 Penn-Union Electric Corp., 315 State St., Erie, Pa. (1)  
 Powercraft Corp., 2215 De Kalb St., St. Louis 4, Mo. (1)  
 Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa. (1)

## JOINTS, Misc.

Bolt—see HANGERS, Fixture, Bolt Joint  
 Cable—see SPLICES, Line  
 Crab—see CONNECTORS, Cable and Wire, Pressure

## K

## KETTLES

1. Compound
2. Water, Electric

Acme Electric Heating Co., 1217 Washington St., Boston 18, Mass. (1)  
 Aeroil Products Co., Inc., 69 Wesley St., South Hackensack, N. J. (1)  
 Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y. (1)  
 Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa. (1)  
 Coates Electric Mfg. Co., 3419-11th Ave., S. W., Seattle 4, Wash. (1, 2)  
 Cooper Co., D. C., 1467 S. Michigan Ave., Chicago 5, Ill. (1, 2)  
 Cope, Inc., T. J., 711 S. 50 St., Phila. 43, Pa. (1)  
 Falcon Equipment Co., 13th St., New Brighton, Pa. (1)  
 Hauck Mfg. Co., 124-136-10th St., Brooklyn 15, N. Y. (1)  
 Hollands Mfg. Co., 342-352 E. 18 St., Erie, Pa. (1)  
 Littleford Bros., Inc., 453 E. Pearl St., Cincinnati 2, Ohio (1)

Salem Tool Co., 767 S. Ellsworth Ave., Salem, Ohio (1)  
 Vulcan Electric Co., 88 Holten St., Danvers, Mass. (1)  
 Wall Mfg. Co., P. O. Box 71, Grove City, Pa. (1)

**KILNS, Electric—see FURNACES**

**KITS, Cable Splicing**

Cam-Lok Div., Empire Products, Inc., 9051 Blue Ash Rd. (Box 98), Cincinnati 36, Ohio  
 Rusgreen Mfg. Co., 14262 Birwood Ave., Detroit 39, Mich.

**KITS, Misc.**

Brush Plating—see **PLATERS**  
 Brush Seating—see **COMPOUNDS, Brush Seating**  
 Live Line Tool—see **TOOLS, Live Line Safety**

**KNEADERS, Dough—see MIXERS, Multiple Purpose**

**KNIVES**

1. Cable Sheath Splitting  
 2. Electrician's  
 Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y. (1, 2)  
 Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa. (2)  
 Chance Co., A. B., 210 N. Allen St., Centralia, Mo. (1)  
 Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill. (1)  
 Klein & Sons, Mathias, 7200 McCormick Rd., Chicago 14, Ill. (1, 2)  
 Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio (2)  
 Miller Equipment Co., Inc., 13th & New Streets, Franklin, Pa. (1, 2)  
 Safety Live Line Tool Co., 973 86th Ave., Oakland 21, Calif. (1)  
 Tomic Sales & Engineering Co., 20000 Sherwood Ave., Detroit 34, Mich. (1)

**KNIVES, Misc. Wire Stripping—see STRIPPERS, Wire**

**KNOBS, Porcelain Wiring**

Du-Co Ceramics Co., Main St. Extension (Box 144), Saxonburg, Pa.  
 Knox Porcelain Corp., 2706 Mynders Ave. (P. O. Box 20311), Knoxville 1, Tenn.  
 Lint, Clyde W., 2323 W. 18 St., Chicago 8, Ill.  
 Porcelain Products, Inc., P. O. Box 300, Findlay, Ohio  
 Rodale Mfg. Co., Inc., 6th & Minor Sts., Emmaus, Pa.  
 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif.  
 Superior Porcelain Co., 931½ Market St., Parkersburg, W. Va.

**KNOBS, Split—see KNOBS, Porcelain Wiring**

**L**

**LABELS, Code—see MARKERS, Wire, Cable and Conduit**

**LACINGS, Armature—see TWINE, Armature Winding and Lacing**

**LACINGS, Belt—see FASTENERS, Belt, and Lacings**

**LADDERS**

Alhambra Foundry Co., Ltd., 1147 Meridian Ave., Alhambra, Calif.  
 Ballymore Co., Wayne, Pa.  
 Chance Co., A. B., 210 N. Allen St., Centralia, Mo.  
 Cope, Inc., T. J., 711 S. 50 St., Phila. 43, Pa.  
 Dayton Safety Ladder Co., 2337 Gilbert Ave., Cincinnati 8, Ohio  
 Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa.  
 Goshen Churn & Ladder, Inc., Goshen, Indiana  
 Lint, Clyde W., 2323 W. 18 St., Chicago 8, Ill.  
 Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif.  
 Leifbried Mfg. Corp., C. H., 95-101 Guernsey St., Brooklyn 22, N. Y.  
 Louisville Ladder Co., 1101 W. Oak St., Louisville 10, Ky.  
 McCabe-Powers Auto Body Co., 5900 N. Broadway, St. Louis 15, Mo.  
 Patent Scaffolding Co., Inc., 38-21 12th St., L. I. C. 1, N. Y.  
 Utilities Service Co., 1 Pine St., Allentown, Pa.  
 White Metal Rolling & Stamping Corp., 80 Moultrie St., Brooklyn 22, N. Y.

**LADDERS, Aerial—see TOWERS, Truck**

**LADLES—see POTS**

**LAMINATIONS, Silicon Steel**

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 Quick Charge, Inc., 1750 N. E. 10th St., Oklahoma City 4, Okla.

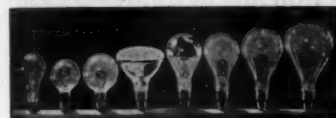
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 Amgro Corp., 2037 W. Division St., Chicago 22, Ill. (1, 3)  
 Amplex Corp., 111 Water St., Brooklyn 1, N. Y. (2, 6)  
 Battle Creek Equipment Co., 32 N. Washington St., Battle Creek, Mich. (5)  
 Celina, Inc., North Island Ave., Batavia, Ill. (3)  
 Champion Lamp Works, 330 Lynnway, Lynn, Mass. (2, 4)  
 Colonial Electric Products, Inc., 115 Market St., East Paterson, N. J. (3)  
 Cooper Hewitt Electric Co., 720-732 Grand St., Hoboken, N. J. (1, 3, 4, 5, 6)  
 Cutler Light Mfg. Co., 2026 N. 22 St., Phila. 21, Pa. (3)  
 Duro-Test Corp., 2321 Hudson Blvd., North Bergen, N. J. (2, 3, 6)  
 Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (2, 5)  
 Federal Sign and Signal Corp., 8700 S. State St., Chicago 19, Ill. (3)  
 General Electric Co., Lamp Division, Nela Park, East Cleveland 12, Ohio (2, 3, 4, 5, 6, 7)  
 ● GRAYBAR ELECTRIC CO., INC., 420 Lexington Ave., N. Y. 17, N. Y. (2)—ADV. PG. 2  
 Illuminating Engineering Co., 2347 East Nine Mile Rd., Hazel Park, Mich. (3)  
 Gates & Co., Inc., George W., Hempstead Tpke & Lucille Ave., Franklin Square, L. I., N. Y. (1, 6, 7)

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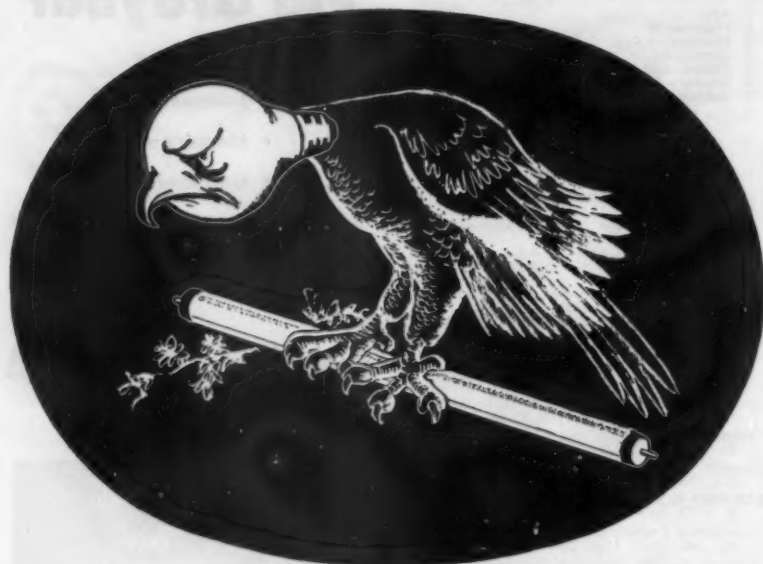
Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (6)  
 Kas-Kel Electric Co., Inc., 5 Union Sq., N. Y. 3, N. Y. (4, 5)  
 Luxor Lighting Products, Inc., 350 5th Ave., New York 1, N. Y. (2, 3, 6)  
 Macbeth Daylighting Corp., P. O. Box 950, Newburgh, N. Y. (2)  
 Pollak Luminaires Corp., 732 S. Federal St., Chicago 5, Ill. (3)  
 Radiant Lamp Corp., 300 Jelliff Ave., Newark 8, N. J. (6)  
 Solar Electric Corp., 121 Central Ave., Warren, Pa. (2)  
 Sperti Faraday, Inc., 1322 E. Church St., Adrian, Mich. (4, 5, 6)  
 Swedish Iron & Steel Corp., 100 Quimby St., Westfield, N. J. (3)  
 Sylvania Electric Products, Inc., 1740 Broadway, N. Y. 19, N. Y. (1, 2, 3, 4, 5, 6)  
 Trindl Products, Ltd., 1807-11 S. Clark St., Chicago 16, Ill. (1)  
 Ultra-Violet Products, Inc., 145 Pasadena Ave., South Pasadena, Calif. (4)  
 Ultra Violet Ray Labs., Inc. 100 Fifth Ave., New York 11, N. Y. (5)  
 Verd-A-Ray Corp., 615 Front St., Toledo 5, Ohio (2, 3)  
 Voltarc Tubes, Inc., 44 Cross St., Norwalk, Conn. (3)  
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5. Insect Repellent
6. Miniature
7. Reflector and Parabolic
8. Sealed Beam

Aerolux Lights Corp., 653 11th Ave., New York 36, N. Y. (3, 4)  
 Almo Mfg. Co., 119 Sussex St., Newark 4, N. J. (3)  
 Amgro Corp., 2037 W. Division St., Chicago 22, Ill. (3)  
 Amplex Corp., 111 Water St., Brooklyn 1, N. Y. (1, 2, 4, 5, 6, 7, 8)  
 Art Specialty Co., 3245 W. Lake St., Chicago 24, Ill. (1)

# LOOK OUT FOR THE LIGHT-HAWK



The keen-eyed *Light-hawk* swoops down wherever lighting maintenance lags and flies away with power dollars. You can stop him by following the principles of good lighting practice presented in the *Champion Maintenance Manual*\* and seeing that the dependable name CHAMPION is on the lamps you use.



\*Write today for a complimentary copy.



## CHAMPION LAMP WORKS

312 Lynnway, Massachusetts

Champion Lamp Works, 330 Lynnway, Lynn, Mass. (4, 5, 7)  
Chicago Miniature Lamp Works, 1500 N. Ogden Ave., Chicago 10, Ill. (6, 8)  
Duro-Test Corp., 2321 Hudson Blvd., North Bergen, N. J. (1, 2, 4, 5, 7)  
Elite Glass Co. Inc., 111 W. 22nd St., New York 11, N. Y. (1)  
General Electric Co., Lamp Division, Nela Park, East Cleveland 12, Ohio (1, 2, 3, 4, 5, 6, 7, 8)  
Kas-Kel Electric Co., Inc., 5 Union Sq., N. Y. 3, N. Y. (2, 4, 6)  
Kirkland Co., H. R., 8 King St., Morristown, N. J. (6)  
Luxor Lighting Products, Inc., 350 5th Ave., New York 1, N. Y. (1, 2, 4, 5, 7)  
Magni Flood Inc., 38 N. Second Ave., Mt. Vernon, N. Y. (7)  
Marvel Lamp Co., 307 Newark St., Hoboken, N. J. (1, 2, 4, 5, 7)  
McKay Chemical Co., Inc., 880 Pacific St., Brooklyn 38, N. Y. (2)  
Miskella Infra-Red Co., E. 73rd & Grand Ave., Cleveland 4, Ohio (4)  
National Carbon Co., 30 E. 42 St., N. Y. 17, N. Y. (6, 8)  
North American Electric Lamp Co., 1014 Tyler St., St. Louis 6, Mo. (4, 6)  
Northern Incandescent Lamp Co., 1 Newark St., Hoboken, N. J. (1, 2)  
Practical Electric Products Inc., 330 E. 148 St., Bronx 53, N. Y. (4)  
Radiant Lamp Corp., 300 Jelliff Ave., Newark 8, N. J. (1, 2, 4, 7)  
Solar Electric Corp., 121 Central Ave., Warren, Pa. (1, 2, 4, 5)  
Stonco Electric Products Co., 333 Monroe Ave., Kenilworth, N. J. (8)  
Unity Mfg. Co., 2909 S. Indiana Ave., Chicago 16, Ill. (1, 2, 8)  
Verd-A-Ray Corp., 615 Front St., Toledo 5, Ohio (1, 2, 4, 5, 7)  
Weldon Mfg. Co., 461-463 Broome St., New York 13, N. Y. (4, 6)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2, 5, 6, 8)  
● WESTINGHOUSE ELECTRIC SUPPLY CO., 40 Wall St., New York 5, N. Y. (1)—ADV. PG. SECOND COVER

### LAMPS, Misc.

Bulls-Eye—see BULLS-EYES; LIGHTS, Pilot  
Odor Control—see GENERATORS, Ozone  
Signal—see LIGHTS, Pilot  
Therapeutic—see LAMPS, Electric Discharge, Health and Sun  
Ultra-Violet—see LAMPS, Electric Discharge, Germicidal; LAMPS, Electric Discharge, Health and Sun

### LAMPS, (Fixtures, Industrial)

1. Bench and Machine
2. Portable, Clamp
3. Portable, Hand
4. Portable, Hand, Including Transformer
5. Portable, Hand, Hazardous Location
6. Warning and Signal

Acme Lite Products Co., Congers, N. Y. (2, 3)  
Adjustable Fixture Co., 104 E. Mason St., Milwaukee 2, Wis. (1, 2)  
Aerolux Lights Corp., 653 11th Ave., New York 36, N. Y. (6)  
Alco Lite Corp., 1234 N. Paulina St., Chicago 22, Ill. (2, 3)  
Airsco Mfg. Co., Inc., 435 Melwood St., Pittsburgh 13, Pa. (3)  
Art Specialty Co., 3245 W. Lake St., Chicago 24, Ill. (1, 2, 3, 4)  
Associated Lighting Service, 876 Kaymyn St., Redwood City, Calif. (6)  
Auth Electric Co., Inc., 34-20 45th St., L. I. C. 1, N. Y. (6)  
Beckley Electric Co., Inc., 468-470 Grand Ave., Brooklyn 38, N. Y. (1, 2)  
Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (1, 3, 6)  
Black Mfg. Co., M., 300-08 N. Third St., Phila. 6, Pa. (2, 3)  
Burton Mfg. Co., 11201 W. Pico Blvd., Los Angeles 64, Calif. (2, 3, 4)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (2, 3)  
Commercial Reflector & Mfg. Co., 3109 Maple Ave., Los Angeles 11, Calif. (1, 2, 3, 4)  
Compo Corp., 2251 W. St. Paul Ave., Chicago 47, Ill. (2, 3)  
● CROUSE-HINDS CO., Syracuse 1, N. Y. (3, 5)—ADV. PG. 116-117  
Day-Ray Products, Inc., 1133 Mission St., South Pasadena, Calif. (3, 4, 5)  
Derrick Light & Equipment Co., 1201 E. Daggett (P. O. Box 414), Fort Worth, Tex. (3)  
Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (2, 3)  
Electric Cord Co., 195 William St., N. Y. 38, N. Y. (3, 6)  
Ericson Mfg. Co., 5209 Euclid Ave., P. O. Box 1401, Cleveland 3, Ohio (3, 4)  
Flexo International Corp., 3255 W. Lake St., Chicago 24, Ill. (1)  
Fluores-O-Lite Co., Evans Terminal, North Broad St., Hillside 5, N. J. (1)  
Fosterite Pressed Steel Corp., N. Main St., Fostoria, Ohio (1, 2, 3)  
Garden City Plating & Mfg. Co., 1758 N. Ashland Ave., Chicago 22, Ill. (1)  
Gardner Products Co., 15244 Aubrey, Detroit 23, Mich. (1)



General Lamps Mfg. Corp., Elwood, Ind. (1, 2, 3)  
Guyan Machinery Co., Inc., Box 150, Logan, W. Va. (5)  
H. & H. Fixture Co., 1313 Walton Ave., St. Louis 13, Mo. (3)  
Hughey & Phillips Inc., 3300 N. San Fernando Blvd., Burbank, Calif. (6)  
Industrial Devices Inc., Edgewater 19, N. J. (6)  
Industrial Lamp Corp., 14th & Blaine Sts., Elkhart, Ind. (1, 2)  
Joy Mfg. Co., Electrical Connector Div., 1201 Macklind Ave., St. Louis 10, Mo. (3)  
Kas-Kel Electric Co., Inc., 5 Union Sq., N. Y. 3, N. Y. (2, 3)  
Koehler Mfg. Co., 395 Lincoln St., Marlboro, Mass. (3, 4, 5)  
Lintern Corp., Route 20 East, Painesville, Ohio (6)  
Litcraft Mfg. Corp., 8 E. 36 St., N. Y. 16, N. Y. (2)  
Marks Mfg. Co., 700 N. Carpenter St., Chicago 22, Ill. (1, 2)  
Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio (3, 5)  
● McGILL MFG. CO., INC., Valparaiso, Ind. (3, 5)—ADV. PG. 132  
MiroFlector Co., Inc., 148 19th St., Brooklyn 32, N. Y. (1, 2, 3, 5)  
Natale Machine & Tool Co., 339 Highway #17, Carlsbad, N. J. (2, 3)  
Portable Light Co., Inc., 216 William St., New York 38, N. Y. (3, 4, 6)  
Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (3, 5, 6)  
Quaker City Electric Mfg. Co., 2810 E. Pacific St., Phila. 34, Pa. (1)  
● RODALE MFG. CO., INC., 6th & Minor Sts., Emmaus, Pa. (2, 3)—ADV. PG. 143  
Royal Electric Co., Inc., 95 Grand Ave., Pawtucket, R. I. (3)  
S & M Lamp Co., 119 W. 36th Pl., Los Angeles 7, Calif. (3, 5)  
Smith-Victor Corp., Griffith, Ind. (2)  
Solar Electric Corp., 121 Central Ave., Warren, Pa. (2)  
Spencer Industries, 1508 N. Mascher St., Phila. 22, Pa. (1, 2)  
Standard Novelty and Lamp Co., 823 S. Wabash Ave., Chicago 5, Ill. (2)  
Staber Mfg. Co., 2700 Roosevelt Rd., Broadview, Ill. (1, 2)  
Stocker & Yale, Inc., Green St., Marblehead, Mass. (1, 3)  
Stonco Electric Products Co., 333 Monroe Ave., Kenilworth, N. J. (2)  
Sun-Lite Mfg. Co., 2355 Bellevue Ave., Detroit 7, Mich. (1, 2)  
Swiheller Co., Inc., 43-34th St., Brooklyn 32, N. Y. (1, 2)  
U-C-Lite Mfg. Co., 1050 W. Hubbard St., Chicago 22, Ill. (3, 6)  
Unity Mfg. Co., 2909 S. Indiana Ave., Chicago 16, Ill. (3, 6)  
Vimco Mfg. Co., Inc., 105 Brayton St., Buffalo 13, N. Y. (1)  
Wallace & Tierman Inc., 25 Main St., Belleville, N. J. (6)  
Weldon Mfg. Co., 461-463 Broome St., New York 13, N. Y. (1, 2, 3, 5)  
White Co., O. C., 15-21 Hermon St., Worcester 8, Mass. (1, 2)  
Woodhead Co., Daniel, 15 N. Jefferson St., Chicago 6, Ill. (3, 4, 5)  
Woodward Machine Co., Lighting Div., 4833 Elmhurst, Detroit 4, Mich. (1, 2)

#### LAMPS (Fixtures, Residential)

1. Bed
2. Floor and Bridge
3. Pin-Up, Wall
4. Sewing Machine
5. Table and Desk

Adjustable Fixture Co., 104 E. Mason St., Milwaukee 2, Wis. (1, 2, 4, 5)  
Admiral Corp., 3800 Cortland St., Chicago 47, Ill. (1, 3, 5)  
Aerolux Lights Corp., 653 11th Ave., New York 36, N. Y. (3, 5)  
Afco Lite Corp., 1234 N. Paulina St., Chicago 22, Ill. (3)  
Amplex Corp., 111 Water St., Brooklyn 1, N. Y. (3, 5)  
Arrow Lamp Mfg. Co., Inc., 350 5th Ave., New York 1, N. Y. (2, 5)  
Art Metal Co., 1814 E. 40 St., Cleveland 3, Ohio (1)  
Art Specialty Co., 3245 W. Lake St., Chicago 24, Ill. (1, 3, 4, 5)  
Associated Lighting Service, 876 Kaynne St., Redwood City, Calif. (1, 5)  
Atlantic Lamp Co., 1938 W. North Ave., Chicago 22, Ill. (2, 5)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (1, 3, 4)  
Colonial-Premier Co., 46 W. Superior St., Chicago 10, Ill. (1, 2, 3, 5)  
Commercial Reflector & Mfg. Co., 3109 Maple Ave., Los Angeles 11, Calif. (1)  
Compco Corp., 2251 W. St. Paul Ave., Chicago 47, Ill. (1)  
Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (1, 2, 4, 5)  
Eagle Mfg. Co., 3508 Avalon Blvd., Los Angeles 11, Calif. (3, 5)  
Ednor Lamp Co., 42 Lispenard St., New York 13, N. Y. (3, 4, 5)  
Electro Silly-A-King Corp., 1535 South Paulina St., Chicago 8, Ill. (1)

Elite Glass Co., Inc., 111 W. 22nd St., New York 11, N. Y. (3)  
Fenton Brewer, Inc., 225 Fifth Ave., N. Y. 10, N. Y. (1, 2, 3, 5)  
Flexo International Corp., 3255 W. Lake St., Chicago 24, Ill. (2, 3, 5)  
Fostoria Pressed Steel Corp., N. Main St., Fostoria, Ohio (4, 5)  
General Lamps Mfg. Corp., Elwood, Ind. (1, 2, 3, 5)  
General Lighting Co., 248 McKibbin St., Brooklyn 6, N. Y. (2, 5)  
Gill Glass and Fixture Co., Amber & Tioga Sts., Phila. 34, Pa. (3)  
H. & H. Fixture Co., 1313 Walton Ave., St. Louis 13, Mo. (3)  
Industrial Lamp Corp., 14th & Blaine Sts., Elkhart, Ind. (1, 3, 5)  
La Salle Products, Inc., 143 Seneca St., Buffalo, N. Y. (1, 3, 5)  
Laurel Lamp Mfg. Co., Inc., Rome & Magazine Sts., Newark 5, N. J. (1, 2, 3, 5)  
Lightoller, Inc., 346 Claremont Ave., Jersey City 5, N. J. (1, 2, 3, 4, 5)  
Litcraft Mfg. Corp., 8 E. 36 St., N. Y. 16, N. Y. (1, 2, 3, 5)  
Marks Mfg. Co., 700 N. Carpenter St., Chicago 22, Ill. (1, 2, 3, 5)  
MiroFlector Co., Inc., 148 19th St., Brooklyn 32, N. Y. (1, 2, 3, 4, 5)  
Moe Light Div., Thomas Industries, Inc., 700 Oak St., Ft. Atkinson, Wis. (3, 5)  
Prescolite Mfg. Corp., 2229 Fourth St., Berkeley 10, Calif. (1, 2, 3, 5)  
Progress Mfg. Co., Inc., Castor Ave. & Tulip St., Phila. 34, Pa. (1, 3, 5)  
Quaker City Electric Mfg. Co., 2810 E. Pacific St., Phila. 34, Pa. (1)  
Rex Electric Mfg. Corp., 221 N. Water St., Milwaukee 2, Wis. (1)  
Ro-Son, Inc., 98 N. 7th St., Brooklyn 11, N. Y. (3)  
Rodale Mfg. Co., Inc., 6th & Minor Sts., Emmaus, Pa. (1, 5)  
Stamford Lighting, 429 W. Broadway, New York 12, N. Y. (2, 3, 5)  
Standard Novelty and Lamp Co., 823 S. Wabash Ave., Chicago 5, Ill. (1, 2, 3, 5)  
Swiheller Co., Inc., 43-34th St., Brooklyn 32, N. Y. (1, 3, 4, 5)  
Sylvania Electric Products, Inc., 1740 Broadway, N. Y. 19, N. Y. (3)  
Verplex Co., 100 Middlesex Turnpike, Essex 1, Conn. (1, 2, 3, 5)  
Versen Co., Kurt, Englewood, N. J. (1, 2, 3, 5)  
Weldon Mfg. Co., 461-463 Broome St., New York 13, N. Y. (1, 2, 5)  
White Co., O. C., 15-21 Hermon St., Worcester 8, Mass. (1, 2, 5)

#### LANTERNS, Portable

1. Dry Battery
2. Storage Battery

Burgess Battery Co., Freeport, Ill. (1)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (1)  
Carpenter Mfg. Co., 2 Bradley St., Somerville 45, Mass. (1, 2)  
Edison, Inc., Thomas A., Edison Storage Battery Div., West Orange, N. J. (2)  
Electric Cord Co., 195 William St., N. Y. 38, N. Y. (1)  
Exide Industrial Div., Electric Storage Battery Co., 42 S. 15 St., Phila. 2, Pa. (2)  
Hadco Aluminum Products Co., 501 Pressley St., Pittsburgh 12, Pa. (1)  
Haledy Electronics Co., 57 William St., N. Y. 5, N. Y. (1)  
Hause-O-Lite Corp., 2430 S. Ashland Ave., Chicago 7, Ill. (1)  
Justrite Mfg. Co., 2061 N. Southport Ave., Chicago 14, Ill. (1)  
Lightlamps, Inc., 95 Atlantic Ave., Brooklyn 1, N. Y. (1, 2)  
Olin Mathieson Chemical Corp., Electrical Div., New Haven 4, Conn. (1)  
Perkins Battery Co., 1601 Monroe St., York, Pa. (2)  
Portable Light Co., Inc., 216 William St., N. Y. 38, N. Y. (1, 2)  
Sentry-Lite Div., Hobby & Brown Electronic Corp., 55 Front St., Rockville Centre, N. Y. (2)  
Sireno Co., Inc., 214 William St., New York 38, N. Y. (1, 2)  
Surette Storage Battery Co., Inc., Jefferson Ave., Salem, Mass. (2)  
U-C-Lite Mfg. Co., 1050 W. Hubbard St., Chicago 22, Ill. (1, 2)  
Unity Mfg. Co., 2909 S. Indiana Ave., Chicago 16, Ill. (1, 2)

#### LENSES

1. Floodlight
2. Lighting Fixture
3. Spotlight

Afco Lite Corp., 1234 N. Paulina St., Chicago 22, Ill. (1, 2, 3)  
Art Metal Co., 1814 E. 40 St., Cleveland 3, Ohio (2, 3)  
Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (1, 2)  
Capitol Stage Lighting Co., Inc., 527 W. 45 St., New York 36, N. Y. (3)  
Century Lighting Inc., 521 W. 43 St., New York 36, N. Y. (1, 3)  
Commercial Reflector & Mfg. Co., 3109 Maple Ave., Los Angeles 11, Calif. (2, 3)

Corning Glass Works, Corning, N. Y. (1, 2, 3)  
Crouse-Hinds Co., Syracuse 1, N. Y. (1, 2, 3)  
Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa. (1)  
Electro-Silly-A-King Corp., 1535 South Paulina St., Chicago 8, Ill. (1, 2, 3)  
Erie Glass Mfg. Co., 564 Union Trust Bldg., Pittsburgh 19, Pa. (2)  
Holophane Co., Inc., 342 Madison Ave., New York 17, N. Y. (2)  
Hub Electric Co., 2255 W. Grand Ave., Chicago 12, Ill. (2, 3)  
Kirilin Co., 3435 E. Jefferson Ave., Detroit 7, Mich. (2)  
Kileg Bros. Universal Electric Stage Lighting Co., Inc., 321 W. 50 St., N. Y. 19, N. Y. (3)  
Kopp Glass Inc., 2233 Palmer St., Swissvale, Pa. (1, 2, 3)  
Lancaster Lens Co., Lancaster, Ohio (1, 2, 3)  
McKee Div., Thatcher Glass Mfg. Co., Inc., Grand Central Ave., Elmira, N. Y. (1, 2, 3)  
McPhibben Mfg. Co., Inc., 1329 Willoughby Ave., Brooklyn 37, N. Y. (2, 3)  
Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (1, 2)  
Rodale Mfg. Co., Inc., 6th & Minor Sts., Emmaus, Pa. (3)  
S & M Lamp Co., 119 W. 36th Pl., Los Angeles 7, Calif. (1)  
Spero Electric Corp., 20500 St. Clair Ave., Cleveland 17, Ohio (1)  
Staber Mfg. Co., 2700 Roosevelt Rd., Broadview, Ill. (1)  
Stonco Electric Products Co., 333 Monroe Ave., Kenilworth, N. J. (1, 2, 3)  
Unity Mfg. Co., 2909 S. Indiana Ave., Chicago 16, Ill. (1, 3)  
Versen Co., Kurt, Englewood, N. J. (2)

#### LIGHTS

1. Bull-Eye
2. Pilot

Airserco Mfg. Co., Inc., 435 Melwood St., Pittsburgh 13, Pa. (1, 2)  
Auth Electric Co., Inc., 34-20 45th St., L. I. C. 1, N. Y. (1, 2)  
Bryant Electric Co., Box D Barnum Station, Bridgeport 2, Conn. (1, 2)  
Burton Mfg. Co., 11201 W. Pico Blvd., Los Angeles 16, Calif. (1, 2)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (2)  
Chicago Miniature Lamp Works, 1500 N. Ogden Ave., Chicago 10, Ill. (2)  
Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (2)  
Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (2)  
Crouse-Hinds Co., Syracuse 1, N. Y. (2)  
Edwards Co., Inc., Norwalk, Conn. (1)  
Federal Screw Products, Inc., 3917-25 N. Kedzie Ave., Chicago 18, Ill. (2)  
Hart Mfg. Co., 110 Bartholomew Ave., Hartford, Conn. (1, 2)  
Hubbell Inc., Harvey, State & Bostwick Ave., Bridgeport 2, Conn. (1, 2)  
Industrial Devices Inc., Edgewater 19, N. J. (2)  
Johnson Co., E. F., Waseca, Minn. (1, 2)  
Kirkland Co., H. R., 8 King St., Morristown, N. J. (1, 2)  
Kulka Electric Mfg. Co., Inc., 633 S. Fulton Ave., Mount Vernon, N. Y. (2)  
McPhibben Mfg. Co., Inc., 1329 Willoughby Ave., Brooklyn 37, N. Y. (1)  
MiroFlector Co., Inc., 148 19th St., Brooklyn 32, N. Y. (1, 2)  
North American Electric Lamp Co., 1014 Tyler St., St. Louis 6, Mo. (2)  
Pass & Seymour Inc., Syracuse 9, N. Y. (2)  
Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (1, 2)  
Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (1, 2)  
Rodale Mfg. Co., Inc., 6th & Minor Sts., Emmaus, Pa. (1, 2)  
Square D Co., 6060 Rivard St., Detroit 11, Mich. (2)  
Sylvania Electric Products, Inc., 1740 Broadway, N. Y. 19, N. Y. (2)  
Versen Co., Kurt, Englewood, N. J. (1)

#### LINKS, Fuse

1. Over 600 Volts
2. Under 600 Volts

Chance Co., A. B., 210 N. Allen St., Centalla, Mo. (1)  
Commercial Enclosed Fuse Co. of N. J., 6812 Polk St., Guttenberg, N. J. (1, 2)  
Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (2)  
Economy Fuse & Mfg. Co., 2717 N. Greenview Ave., Chicago 14, Ill. (2)  
General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn. (2)  
Line Material Co., 700 West Michigan St., Milwaukee, Wis. (1)  
Monarch Fuse Co., Ltd., 118 E. First St., Jamestown, N. Y. (2)  
Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (2)  
Pierce Renewable Fuses, Inc., Box F, Leicester, N. Y. (2)  
Royal Electric Co., Inc., 95 Grand Ave., Pawtucket, R. I. (2)  
S & G Electric Co., 4435 Ravenswood Ave., Chicago 40, Ill. (1)

## PRODUCT DIRECTORY

Solar Electric Corp., 121 Central Ave., Warren, Pa. (2)  
 Superior Fuse & Mfg. Co., Inc., 221 Hudson St., Hoboken, N. J. (1, 2)  
 Trico Fuse Mfg. Co., 2948 No. 5th St., Milwaukee 12, Wis. (2)

### LOCATORS

#### 1. Cable 2. Fault

Electrical Distributors Co., Liberty Trust Bldg., Phila. 7, Pa. (1, 2)  
 Excel Electric Service Co., Inc., 2113 S. Western Ave., Chicago 8, Ill. (1, 2)  
 Ferr Mfg. Co., Inc., 2125 S. Western Ave., Chicago 8, Ill. (1, 2)  
 Fisher Research Laboratory Inc., Palo Alto, Calif. (1)  
 Goldak Co., 1544 W. Glenoaks Blvd., Glendale 1, Calif. (1)  
 Miller & Sons, R. F., Harvard, Neb. (1, 2)  
 Parr Mfg. Corp., 44 Austin St., Newark 5, N. J. (2)  
 Peschel Electronics, Inc., 13 Garden St., New Rochelle, N. Y. (2)  
 Safety Live Line Tool Co., 973 86th Ave., Oakland 21, Calif. (2)

### LOCATORS—see also DETECTORS

#### LOCKNUTS

##### 1. Conduit 2. Reducing

Blackhawk Industries, 250 S. Main St., Dubuque, Iowa (1)  
 Briegal Method Tool Co., 184 N. E. First St., Galva, Ill. (1)  
 Duro Fittings Co., 2040 Santa Fe Ave., Los Angeles 21, Calif. (1)  
 Electrical Fittings Corp., 37-50 57th St., Woodside 77, N. Y. (1)  
 Federal Screw Products, Inc., 3917-25 N. Kedzie Ave., Chicago 18, Ill. (1)  
 Geodney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (1, 2)  
 Green, Inc., R. H., 1201 24th St., Oakland 7, Calif. (2)  
 Killark Electric Mfg. Co., 3940 Easton Ave., St. Louis 13, Mo. (1)  
 Metallectrics, Inc., 677 Broadway, N. Y. 12, (1, 2)  
 ● MIDWEST ELECTRIC MFG. CO., 1639 Walnut St., Chicago 12, Ill. (1)—ADV. PG. 104-105  
 Rattan Mfg. Co., 10 Wall St. (P. O. Box 1745), New Haven 7, Conn. (1)  
 Richards Co., J. R., P. O. Box 482, Carnegie, Pa. (1)  
 Roller, Inc., Wm. G., 159 Liberty Ave., Mineola, N. Y. (1)  
 Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa. (1)  
 Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (1, 2)  
 Thepitt Mfg. Co., Gregg & Hammond Sts., Carnegie, Pa. (1)  
 Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J. (1)  
 Yorkville Metal Products Co., 677 Broadway, N. Y. 12, N. Y. (1, 2)

#### LOCKS, Fluorescent Lamp

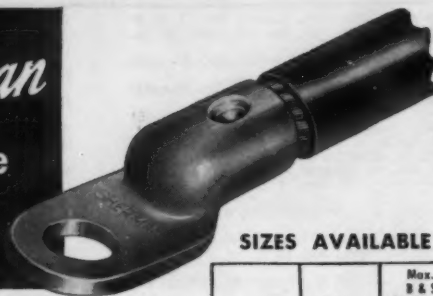
Ladbury Co., Inc., Boston Post Rd. (P. O. Box 88), Branford, Conn.

#### LOUVERS

##### 1. Fan and Blower 2. Lighting Fixture 3. Wall

Abrams Lighting, 3422 Market St., Phila 4, Pa. (2)  
 Air & Refrigeration Corp., 439 Madison Ave., New York City, N. Y. (1)  
 American Cooler Corp., 3604 Mayflower St. (P. O. Box 2300), Jacksonville 3, Fla. (1, 3)  
 American Louver Co., 4345 N. Elston Ave., Chicago 30, Ill. (2)  
 American Warming & Ventilating Co., 1017 Summit St., Toledo, Ohio (1, 3)  
 Ammerman Co., C. L., 110 N. 2nd St., Minneapolis, Minn. (1, 3)  
 Arex Co., 612 N. Michigan Ave., Chicago 11, Ill. (3)  
 Argo Products Co., 1008 N. 22 St., St. Louis 6, Mo. (1, 3)  
 Art Metal Co., 1814 E. 40 St., Cleveland 3, O. (2)  
 Associated Lighting Service, 876 Kayne St., Redwood City, Calif. (2)  
 Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (2)  
 Canning-Pekara, Inc., 2144 N. Wood St., Chicago 14, Ill. (2)  
 Carey Mfg. Co., Phillo, Cincinnati 15, Ohio (1)  
 Columbia Electric & Mfg. Co., North 2310 Fancher Way, Spokane, Wash. (2)  
 Commercialair, Inc., 300 Pacific St., Brooklyn 1, N. Y. (1, 3)  
 Compo Corp., 2251 W. St. Paul Ave., Chicago 47, Ill. (2)  
 Donley Brothers Co., 13938 Miles Ave., Cleveland 5, Ohio (3)  
 Elgo Shutter & Mfg. Co., 2738 W. Warren Ave., Detroit 8, Mich. (1, 3)  
 Emerson Electric Mfg. Co., 8100 Florissant Ave., St. Louis 21, Mo. (1)  
 Ender-Monarch Corp., 50 Sylvester St., Westbury, N. Y. (2)  
 Frigid, Inc., 128-168 32nd St., Brooklyn 32, N. Y. (1)  
 Great Northern Mfg. Corp., 1056 N. Wood St., Chicago 22, Ill. (2)  
 Hamilton Fan & Blower Co., 2266 Bogen St., Cincinnati 14, Ohio (1)

## New Sherman Crimp-Type TERMINAL LUGS



### SIZES AVAILABLE

No.	Amp. Cap. N. B. C.	Max. B & S (A. W. G.) Stranded Wire
ST8	35	8
ST6	50	6
ST4	70	4
ST2	90	2
ST0	125	0
ST2/0	150	00
ST3/0	175	000
ST4/0	225	0000

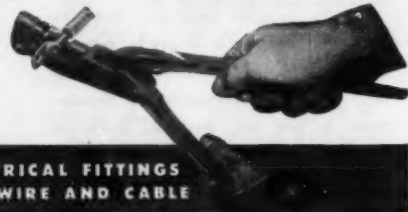
## For Commercial Wire

- Wire sizes 8 through 4/0
- Approved by Underwriter's Laboratories when used with the Sherman Crimping Tool.
- Highest grade electrolytic copper, plainly marked with wire size and ampere rating.
- Completely seamless — made under exclusive Sherman patents.

Investigate Sherman Crimp-Type Terminal Lugs — They're Fast, Positive and Economical — Write for Bulletin.



ELECTRICAL FITTINGS  
FOR WIRE AND CABLE



Hasco Electric Corp., 11 Crary Ave., Mount Vernon, N. Y. (2)  
 Hexcel Products Inc., 951 61st St., Oakland 8, Calif. (2)  
 Kent Metal Mfg. Co., Inc., 490 Johnson Ave., Brooklyn 37, N. Y. (2)  
 Keystone Electric Mfg. Co., 2228 E. Tioga St., Phila. 34, Pa. (2)  
 Kirk & Blum Mfg. Co., 3120 Forrer St., Cincinnati 9, Ohio (1)  
 Kirlin Co., 3435 E. Jefferson Ave., Detroit 7, Mich. (2)  
 Louverall Lighting Corp., 1770 W. Berteau Ave., Chicago 13, Ill. (2)  
 McPhibben Mfg. Co., Inc., 1329 Willoughby Ave., Brooklyn 37, N. Y. (2)  
 Meier Electric and Machine Co., Inc., 3525 E. Washington St., Indianapolis 7, Ind. (1, 3)  
 Metalcraft Products Co., Inc., Mascher & Lippincott Sts., Phila. 33, Pa. (2)  
 Mirofactor Co., Inc., 148 19th St., Brooklyn 32, N. Y. (2)  
 Neo-Ray Products Inc., 315 E. 22 St., N. Y. 10, N. Y. (2)  
 Perfect-Line Mfg. Corp., Old Country Rd. & Railroad Ave., P. O. Box 65, Hicksville, L. I., N. Y. (1, 2, 3)  
 Quaker City Electric Mfg. Co., 2810 E. Pacific St., Phila. 34, Pa. (2)  
 Reed Unit-Fans, Inc., 1001 St. Charles Ave., New Orleans, La. (1, 3)  
 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)  
 Simpson Co., 1060 E. 11 St., Oakland 6, Calif. (3)  
 Star Expansion Bolt Co., 147 Cedar St., N. Y. 6, N. Y. (1)  
 Steber Mfg. Co., 2700 Roosevelt Rd., Broadview, Ill. (2)  
 Swirell Co., Inc., 43-34th St., Brooklyn 32, N. Y. (2)  
 Sylvania Electric Products, Inc., 1740 Broadway, N. Y. 19, N. Y. (2)  
 Tri-Part Mfg. Co., 934 Plum St., Detroit 1, Mich. (2)  
 Wakefield Co., 731 S. Water St., Vermilion, Ohio (2)  
 Westinghouse Electric Corp., Lighting Div., 1216 W. 58th St. (P. O. Drawer 5817), Cleveland 1, Ohio (2)  
 William Products Co., H. E., 106 S. Main St., Carthage, Mo. (2)

### LUGS and TERMINALS, Cable and Wire

Anderson Brass Works, Inc., P. O. Drawer 2151, Birmingham 1, Ala.  
 ● BLACKBURN CORP., Jasner, 35 Madison St., St. Louis 6, Mo.—ADV. PG. 107  
 Buchanan Electrical Products Corp., 237 U. S. Route 22, Hillside, N. J.  
 Bulldog Electric Products Co., 7610 Joseph Campau, Detroit, Mich.

Cam-Lok Div., Empire Products, Inc., 9051 Blue Ash Rd. (Box 98), Cincinnati 36, Ohio  
 Cambridge Thermionic Corp., 445 Concord Ave., Cambridge 38, Mass.  
 Champion Cable Co., 1805 E. 40 St., Cleveland 3, Ohio  
 Delta-Star Electric Div., H. K. Porter Co., Inc., 2437 Fulton St., Chicago 12, Ill.  
 Dossert Mfg. Corp., 249-255 Huron St., Brooklyn 22, N. Y.  
 Federal Screw Products, Inc., 3917-25 N. Kedzie Ave., Chicago 18, Ill.  
 Frankel Connector Co., 27 Vestry St., N. Y. 13, N. Y.  
 General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill.  
 General Electric Co., Trumbull Components Dept., 41 Woodford Ave., Plainville, Conn.  
 Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill.  
 Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo.  
 Keystone Electronics Corp., 423 Broome St., New York 13, N. Y.  
 Kolton Electric Mfg. Co., 123 New Jersey Railroad Ave., Newark 5, N. J.  
 Krueger & Hudepohl, 5 E. Third St., Cincinnati 2, Ohio  
 Kulka Electric Mfg. Co., Inc., 633 S. Fulton Ave., Mount Vernon, N. Y.  
 Malco Tool & Mfg. Co., 4025 W. Lake St., Chicago 24, Ill.  
 Morse Co., Frank W., 1300 Soldiers Field Rd., Boston 35, Mass.  
 ● O. Z. ELECTRICAL MFG. CO., INC., 262 Bond St., Brooklyn 17, N. Y.—ADV. PG. 136  
 Packard Electric Div., General Motors Corp., Warren, Ohio  
 Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa.  
 Penn-Union Electric Corp., 315 State St., Erie Pa.  
 Royal Electric Mfg. Co., 1122 E. 87 St., Chicago 19, Ill.  
 Rusgreen Mfg. Co., 14262 Birwood Ave., Detroit 36, Mich.  
 Shakeproof Div., Illinois Tool Works, St. Charles Rd., Elgin, Ill.  
 Sherman Mfg. Co., H. B., 22 Barney, Battle Creek, Mich.  
 Southern Electrical Equipment Co., 308 W. Bland St., Charlotte 3, N. C.  
 Square D Co., 6060 Rivard St., Detroit 11, Mich.  
 Superior Fuse & Mfg. Co., Inc., 221 Hudson St., Hoboken, N. J.  
 Thomas & Betts Co., Inc., 36 Butler St., Elizabeth, N. J.  
 Vaco Products Co., 317 E. Ontario St., Chicago 11, Ill.  
 Wagner Mfg. Co., Inc., 350 W. Adams St., Jackson, Mo.

### LUMINAIRES—see FIXTURES

**M**

**MACHINES**—see name of machine, such as BENDERS, GRINDERS, THAWERS, etc.

**MAGNETIZERS**

Annis Co., R. B., 1101 N. Delaware St., Indianapolis 2, Ind.  
Electric Arc Sales Co., 5270 Geddes Rd., Ann Arbor, Mich.  
General Electric Co., Carboly Dept., 11177 E. 8 Mile Rd., Detroit 32, Mich.  
General Electric Co., Chemical & Metallurgical Div., Carboly Dept., 11177 E. 8 Mile Rd., Detroit 32, Mich.  
Opad Electric Co., 69 Murray St., New York 7, N. Y.  
Radio Frequency Laboratories, Inc., Boonton, N. J.  
Raytheon Mfg. Co., Equipment Marketing Div., 100 River St., Waltham 54, Mass.  
Shrader Co., F. W., 5788 W. Washington Blvd., Culver City, Calif.  
Vemaline Products Co., P. O. Box 222, Hawthorne, N. J.

**MAGNETS**

Electric Cord Co., 195 William St., N. Y. 38, N. Y.  
Fairbanks, Morse & Co., 60 S. Michigan Ave., Chicago 5, Ill.

**MAGNETS**

**1. Lifting**

**2. Permanent**

Aircraft Specialties, Inc., 415 Howard St., Lapeer, Mich. (1, 2)  
Arnold Engineering Co., P. O. Box G, Marengo, Ill. (1, 2)  
Crucible Steel Co. of America, P. O. Box 88, Henry W. Oliver Bldg., Pittsburgh 30, Pa. (2)  
Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (1)  
Electric Controller & Mfg. Co., 4493 Lee Rd., Cleveland 28, Ohio (1)  
Eriez Mfg. Co., 58 Magnet Drive, Erie, Pa. (1, 2)  
General Electric Co., Carboly Dept., 11177 E. 8 Mile Rd., Detroit 32, Mich. (2)  
General Magnetic Corp., 10001 Erwin Ave., Detroit 34, Mich. (2)  
Magnetic Engineering & Mfg. Co., 850 Van Houten Ave., Clifton, N. J. (1, 2)  
Permanent Magnet Co., Inc., 4437 Bragdon St., Lawrence 26, Ind. (1, 2)  
Shrader Co., F. W., 5788 W. Washington Blvd., Culver City, Calif. (1, 2)  
Stackpole Carbon Co., Tannery St., St. Marys, Pa. (2)  
Stearns Magnetic Inc., 698 S. 28th St., Milwaukee 46, Wis. (1, 2)

**MANDRELS, Conduit**

Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y.  
Shenango-Penn Mold Co., West Third St., Dover, Ohio

**MARKERS**

**1. Pipe and Conduit**  
**2. Wire and Cable**

**3. Tool**

Alpha Wire Corp., 430 Broadway, N. Y. 13, N. Y. (2)  
Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y. (2)  
Berry Co., William B., 117 Causeway St., Boston 14, Mass. (1, 2)  
Brady Co., W. H., 727 W. Glendale Ave., Milwaukee 12, Wis. (1, 2)  
Brand & Co., Inc., William, North & Valley Sts., Willimantic, Conn. (1, 2)  
Bryant Mfg. Co., 410 N. Paulina St., Chicago 22, Ill. (2)  
Dickey-Grabler Co., 10302 Madison Ave., Cleveland 2, Ohio (1, 2)  
Electro-Graphic Graver Co., Toledo Factories Bldg., Toledo 2, Ohio (3)  
Industrial Products Co., 2695 N. Fourth St., Phila. 33, Pa. (1, 2)  
Keyes-Davis Co., 74 - 14th St., Battle Creek, Mich. (1, 2)  
Machinery Electrification, Inc., Northboro, Mass. (2)  
Matthews & Co., James H., 3946 Forbes St., Pittsburgh 13, Pa. (1, 2)  
Natvar Corp., 211 Randolph Ave., Woodbridge, N. J. (2)  
Tec Imports, 14525 Bessemer St., Van Nuys, Calif. (1)  
Westline Products Div., Western Lithograph Co., 600 E. Second St., Los Angeles 54, Calif. (1, 2)

**MASKS, Dust**

Dockson Corp., 3839 Wabash Ave., Detroit 8, Mich.  
General Scientific Equipment Co., 27th & Huntingdon Sts., Phila. 32, Pa.  
Industrial Products Co., 2695 N. Fourth St., Phila. 33, Pa.  
Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio  
Mine Safety Appliances Co., 201 N. Braddock Ave., Pittsburgh 8, Pa.

**MASTS AND HEADS, Service Entrance**

●BLACKHAWK INDUSTRIES, 250 S. Main St., Dubuque, Iowa—ADV. PG. 97  
Electrical Mfg. Co., Box 217, Battle Creek, Mich.  
M. & W. Electric Mfg. Co., Inc., S. Walnut St. (P. O. Box 87), East Palestine, Ohio

# Speed service installations with M & W MAST KITS!

Complete package units  
ready to install

**U. L. APPROVED**

Entrance Cap and Threadless  
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No need to juggle the job to suit the fittings, when using M & W Service Entrance Mast Kits — you have the RIGHT fittings every time! Whether you select 2" or 2½" conduit, pipe ring or strap and lag screw installations, there's an M & W Kit EXACTLY RIGHT with every needed part included. You save time, materials and money... make a neater, more weather-tight installation, too!

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# NOW! ENTRANCE TO GROUND

## "DUAL-GRIP" ENTRANCE HEADS

...built-in connector clamp! No special fittings needed for EMT —no threads to cut on rigid conduit. Complete range of sizes.

## ENTRANCE ELBOWS

...compact, easy to handle, deep-cut threads, weatherproof!

## BRONZE GROUND CLAMPS

...complete line for 1/4" to 4" pipe. Three types cover all connections.

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Dallas, Texas

**Mr. L. W. Cline**  
Wilmington, Delaware

**Dickson Sales Company**  
Atlanta, Ga.

**R. E. Dunn Sales Company**  
Minneapolis, Minn.

**Lint Electric Sales, Inc.**  
Chicago, Ill.

**Mr. Virgil E. Marshall**  
Indianapolis, Ind.

**C. T. Nevins & Associates**  
Narberth, Penna.

**Wm. O. Proby & Associates**  
Portland, Oregon

**Wm. O. Proby & Associates**  
Seattle, Washington

**Sales Engineers Company**  
Denver, Colorado

**Mr. Frank R. Sandy**  
Des Moines, Iowa

**Southland Sales Agents**  
Memphis, Tenn.

**States Wide Marketing & Engineering Co.**  
Columbus, Ohio

**Mr. J. Louis Weyhing**  
Louisville, Kentucky

**Arnold J. Young Company**  
Detroit, Michigan

ALL THREE  
CARRY  
U. L. SEAL



2110 HOWARD ST., ST. LOUIS 8, MO.

Weaver Co., J. A., 2110 Howard St., St. Louis 6, Mo.

## MATS, Heating—see HEATERS (Classified as to Usage), Foot Mat

## MATS, Switchboard Floor Insulating

Atlas Sponge Rubber Co., 806 E. 61 St., Los Angeles 1, Calif.  
Buffalo Weaving & Belting Co., 260 Chandler St., Buffalo 7, N. Y.  
Goodyear Industrial Products Co., Inc., 18 Murray St., N. Y. 10, N. Y.  
Miller Products Co., Inc., 29 Warren St., N. Y. 7, N. Y.  
Minor Rubber Co., Inc., 51 Ackerman St., Bloomfield, N. J.  
New York Belting & Packing Co., 1 Market St., Passaic, N. J.  
Raybestos-Manhattan, Inc., 61 Willett St., Passaic, N. J.  
Salisbury & Co., W. H., 401 N. Morgan St., Chicago 22, Ill.  
United States Rubber Co., Mechanical Goods Div., 1230 Avenue of the Americas, New York 20, N. Y.

## MEASURERS

1. Conduit
2. Amp and Plan
3. Pole
4. Wire and Cable

Burndy Engineering Co., Inc., Norwalk, Conn.  
Durrant Mfg. Co., 1981 No. Buffum St., Milwaukee 1, Wis.  
Hykon Mfg. Co., 163 E. State St. (P. O. Box 923), Alliance, Ohio  
Koeneman Co., R. A., 1408 Delmar Blvd., St. Louis 3, Mo. (2)  
Marvel Rack Mfg. Co., Inc., 24 N. First St., Minneapolis 1, Minn.  
Minneapolis Electric & Construction Co., 80 S. 12 St., Minneapolis 3, Minn.  
Olympic Instrument Laboratories, P. O. Box 62, Cove, Wash.  
Sticht Co., Inc., Herman H., 27 Park Place, New York 7, N. Y.

## MECHANISMS

1. Switch-Operating
2. Valve-Operating

Automatic Temperature Control Co., Inc., 5212 Pulaski Ave., Phila. 44, Pa. (1)  
Bristol Co., Waterbury 20, Conn. (1, 2)

Convair, Inc., P. O. Box 9671, Pittsburgh 16, Pa. (2)  
Cooper Co., Inc., Clark, 317 N. Market St., Palmyra, N. J. (2)  
Delta-Star Electric Div., N. K. Porter Co., Inc., 2437 Fulton St., Chicago 12, Ill. (1)  
Electronics Corp. of America, 77 Broadway, Cambridge 42, Mass. (2)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2)  
Magnetrol, Inc., 2110 S. Marshall Blvd., Chicago 23, Ill. (1, 2)  
Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn. (2)  
Model Electric Products Co., 1500 Bangs Ave., Asbury Park, N. J. (1)  
Powercraft Corp., 2215 De Kalb St., St. Louis 4, Mo. (1)  
Royal Electric Mfg. Co., 1122 E. 87 St., Chicago 19, Ill. (1)  
S & C Electric Co., 4435 Ravenswood Ave., Chicago 40, Ill. (1)  
Southern Electrical Equipment Co., 308 W. Bland St., Charlotte 3, N. C. (1)  
Techniflex Corp., 55 Jersey Ave., Port Jervis, N. Y. (2)

## MEGOhmmeters—see Ohmmeters

## MESSANGER CABLE—See CABLE (Classified as to Composition), Steel Strand

## METAL, Fuse—see ALLOYS, Fusible

## METAL, Thermostatic

American Silver Co., Inc., Industrial Div., 36-07 Prince St., Flushing 54, N. Y.  
Chace Co., W. M., 1600 Beard Ave., Detroit 9, Mich.  
Metals & Controls Corp., General Plate Div., 34 Forest St., Attleboro, Mass.

## METERS

1. Light
2. Liquid Level
3. Radio, Sound, Etc.
4. Sound Level
5. Steam Flow
6. Time Recording
7. Vibration

Aero Instrument Co., 11423 Vanowen St., North Hollywood, Calif. (6)  
Airsco Mfg. Co., Inc., 435 Melwood St., Pittsburgh 13, Pa. (4)  
Amplex Mfg. Co., P. O. Box 2718, Detroit 31, Mich. (2)  
Brey Meter Co., 1050 Ivanhoe Rd., Cleveland 10, Ohio (2, 5)

Bristol Co., Waterbury 20, Conn. (2, 6)  
Brush Electronics Co., 3405 Perkins Ave., Cleveland 14, Ohio (4)  
Burlington Instrument Co., Burlington, Iowa (4, 6)  
Consolidated Engineering Corp., 300 N. Sierra Madre Villa, Pasadena 15, Calif. (7)  
Electro-Mechanical Instrument Co., 812 Chestnut St., Parkside, Pa. (4)  
Esterline-Angus Co., Inc., P. O. Box 596, Indianapolis 6, Ind. (6)  
Fielden Instrument Div., Robertshaw-Fulton Controls Co., 2920 N. Fourth St., Phila. 33, Pa. (2)  
Fischer & Porter Co., 335 Westminster Rd., Hatboro, Pa. (2)  
Fisher Research Laboratories Inc., Palo Alto, Calif. (2)  
General Electric Co., Apparatus Sales Div., 1 River Rd., Schenectady 5, N. Y. (4, 5, 6)  
General Electronic Distributing Co., 98 Park Pl., New York 7, N. Y. (3, 4)  
General Radio Co., 275 Massachusetts Ave., Cambridge 39, Mass. (4, 7)  
Haydon Co., A. W., 232 N. Elm St., Waterbury, Conn. (6)  
Hewlett-Packard Co., 395 Page Mill Rd., Palo Alto, Calif. (3, 4)  
International Instruments, Inc., P. O. Box 2954, New Haven 15, Conn. (3)  
J-B-T Instruments, Inc., 441 Chapel St., New Haven 8, Conn. (6)  
Jackson Electrical Instrument Co., 18 S. Patterson Blvd., Dayton 2, Ohio (3)  
Jerrold Electronics Corp., 26th & Dickinson Sts., Phila. 46, Pa. (2)  
Larson Instrument Co., 24 Orchard St., Tarrytown, N. Y. (6)  
Manning, Maxwell & Moore, Inc., 250 E. Main St., Stratford, Conn. (2, 5)  
Marion Electrical Instrument Co., 400 Canal St., Manchester, N. H. (1)  
Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn. (2, 5)  
Minneapolis-Honeywell Regulator Co., Industrial Div., Wayne & Windrim Aves., Phila. 44, Pa. (2, 5)  
Penn Industrial Instrument Div., Burgess Manning Co., 4110 Haverford Ave., Phila. 4, Pa. (2, 5)  
Reiner Electronics Co., 152 W. 25 St., New York 1, N. Y. (3)  
Republic Flow Meters Co., 2240 Diversey Parkway, Chicago 47, Ill. (2, 5)  
Sangamo Electric Co., 11th & Converse, Springfield, Ill. (1, 2, 6, 7, 8, 9, 10, 11)  
Scott, Inc., Hermon Hosmer, 385 Putnam Ave., Cambridge 39, Mass. (3, 4, 8)  
Trico Fuse Mfg. Co., 2948 No. 5th St., Milwaukee 12, Wis. (2)  
Trimount Instrument Co., 3119 W. Lake St., Chicago 12, Ill. (5)  
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio (3, 4)  
Vibrosco Co., Route 28, Near Kingston (P. O. Box 97), Glenford, N. Y. (7)  
Weston Electric Instrument Corp., 614 Frelinghuysen Ave., Newark 5, N. J. (1, 4)

## METERS, Electric Measuring

1. Ampere-Hour
2. Demand
3. Earth and Ground Resistance
4. Flux (Gauss)
5. Frequency
6. Kilovolt-Ampere
7. Power Factor
8. Var
9. Watthour, Coin-Operated
10. Watthour, Service
11. Watthour, Testing

Aero Instrument Co., 11423 Vanowen St., North Hollywood, Calif. (5)  
Associated Research, Inc., 3758 W. Belmont Ave., Chicago 18, Ill. (3)  
Biddle Co., James G., 1316 Arch St., Phila. 7, Pa. (3, 5)  
Eastern Specialty Co., 3617 N. 8th St., Phila. 40, Pa. (11)  
Esterline-Angus Co., Inc., P. O. Box 596, Indianapolis 6, Ind. (5, 6, 7, 8)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 4, 5, 6, 7, 8, 10, 11)  
General Electronic Distributing Co., 98 Park Pl., New York 7, N. Y. (3, 5, 6, 7, 11)  
● GRAYBAR ELECTRIC CO., INC., 420 Lexington Ave., N. Y. 17, N. Y. (11)—ADV. PG. 2  
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland 8, Ohio (5, 7, 8)  
J-B-T Instruments, Inc., 441 Chapel St., New Haven 8, Conn. (5)  
Marion Electrical Instrument Co., 400 Canal St., Manchester, N. H. (4)  
Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn. (7, 8)  
Rawson Electrical Instrument Co., 124 Potter St., Cambridge 42, Mass. (3, 4)  
Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa. (5, 7, 8, 10)  
Sensitive Research Instrument Corp., 9 Elm Ave., Mount Vernon, N. Y. (3, 4, 5)  
Sticht Co., Inc., Herman H., 27 Park Place, New York 7, N. Y. (3, 5)  
Streeter-Ames Co., 4105 Ravenswood Ave., Chicago, Ill. (2)  
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio (5)  
Varo Mfg. Co., Inc., 1801 Walnut St., Garland, Tex. (5)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2, 5, 6, 7, 10, 11)

●WESTINGHOUSE ELECTRIC SUPPLY CO., 40 Wall St., N. Y. 5, N. Y. (8)—ADV. PG. SECOND COVER

Weston Electrical Instrument Corp., 614 Frelinghuyzen Ave., Newark 5, N. J. (5, 7, 8)

METERS, Misc.

Footcandle—see ANALYZERS, Illumination;  
METERS, Light; PHOTOMETERS  
Totalizing—see RECORDERS, Load Totalizing  
See also AMMETERS; OHMMETERS; VOLT-  
METERS; WATTMETERS; GALVANOM-  
ETERS; SYNCHROSCOPES

MICA, Ground, Row and Plate

Brand Dielectrics, Inc., 57 North St., Willimantic, Conn.  
Concord Mica Corp., 25 Crescent St., Penacook, N. H.  
Continental-Diamond Fibre Co., Newark, Del.  
General Electric Co., Chemical & Metallurgical Div., Coshocton, Ohio  
General Electric Co., Chemical & Metallurgical Div., Pittsfield, Mass.  
Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo.  
Mica Insulator Co., P. O. Box 1076, Schenectady 3, N. Y.  
Micacraft Products, Inc., 701-03 McCarter Highway, Newark 5, N. J.  
Mycalex Corp. of America, 125 Clifton Blvd., Clifton, N. J.  
Safety Live Line Tool Co., 973 86th Ave., Oakland 21, Calif.  
Sylvania Electric Products, Inc., 1740 Broadway, N. Y. 19, N. Y.  
U. S. Mica Co., Inc., Jordan & Van Dyke Sts., East Rutherford, N. J.

MICROPHONES

American Microphone Co., 370 S. Fair Oaks Ave., Pasadena 1, Calif.  
Amperite Co., Inc., 561 Broadway, New York 12, N. Y.  
Clancy Inc., J. R., 1010 Belden Ave., Syracuse, N. Y.  
Connecticut Telephone & Electric Corp., 70 Britannia St., Meriden, Conn.  
Electro-Voice Inc., 404 Carroll St., Buchanan, Mich.  
Excutech, Inc., 415 Lexington Ave., N. Y. 17, N. Y.  
General Electric Co., Electronics Div., Electronics Park, Syracuse, N. Y.  
Motorola Communications & Electronics, Inc., 4501 W. Augusta Blvd., Chicago 51, Ill.  
Port-O-Vox Corp., 521 W. 43 St., New York 36, N. Y.  
Radio Corp. of America, Engineering Products Div., Front & Cooper Sts., Camden 2, N. J.  
Remier Co., Ltd., 2101 Bryant St., San Francisco 10, Calif.  
Roanwell Corp., 662 Pacific St., Brooklyn 17, New York  
Shure Brothers, Inc., 225 W. Huron St., Chicago 10, Ill.  
Telephonics Corp., Park Ave., Huntington, N. Y.  
Turner Co., 909 17th St., N. E., Cedar Rapids, Iowa

MIXERS

1. Multiple Purpose
2. Point

International Engineering, Inc., P. O. Box 973, Dayton 1, Ohio (1, 2)  
Miller Mfg. Co., 9425 Seymour Ave., Schiller Park, Ill. (2)  
Miracle Paint Rejuvenator Co., 500 N. Robert St., St. Paul 1, Minn. (2)  
Mixing Equipment Co., Inc., 135 Mt. Read Blvd., Rochester 11, N. Y. (1, 2)  
Red Devil Tools, 130 Colt St., Irvington 11, N. J. (1, 2)  
Reynolds Electric Co., 3000 River Rd., River Grove, Ill. (1)  
Siebring Mfg. Co., George, Iowa (1)  
Southern Electric Products, 202 S. Towers St. (P. O. Box 406), Anderson, S. C. (1, 2)  
United Electric Motor Co., 178 Centre St., N. Y. 13, N. Y. (1)

MOLDING, Metal—see RACEWAY

MOTIONS, Display, and Turntables

Art Specialty Co., 3245 W. Lake St., Chicago 24, Ill.  
Haft & Sons, Inc., 950 Kent Ave., Brooklyn 5, N. Y.  
Merkle-Korff Gear Co., 213 N. Morgan St., Chicago 7, Ill.

MOTOR-GENERATORS

Alax Electrothermic Corp., Alax Park, Trenton 5, N. J.  
Allis Co., Louis, 427 E. Stewart St., Milwaukee 7, Wis.  
Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis.  
American Electronics, Inc., 4811 Telegraph Rd., Los Angeles 22, Calif.  
Bogue Electric Mfg. Co., 52 Iowa Ave., Paterson 3, N. J.  
Brush Abco, Inc., 60-07 39th Ave., Woodside 77, Long Island, N. Y.

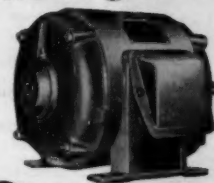
Century Electric Co., 1806 Pine St., St. Louis 3, Mo.  
Chandeysson Electric Co., 4084 Bingham Ave., St. Louis 16, Mo.  
Columbia Electric Mfg. Co., 4519 Hamilton Ave., Cleveland 14, Ohio  
Crocker-Wheeler Div., Elliott Co., Ampere, N. J.  
Electric Products Co., 1725 Clarkstone Rd., Cleveland 12, Ohio  
Electric Specialty Co., 211 South St., Stamford, Conn.  
Electro Dynamic Div., General Dynamics Corp., 163 Ave. A, Bayonne, N. J.  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
Georator Corp., Manassas, Va.  
Hallett Mfg. Co., 1601 W. Florence Ave., Inglewood, Calif.  
Hertner Electric Co., 12690 Elmwood Ave., Cleveland 11, Ohio  
Howard Industries Inc., 1760 State St., Racine, Wis.  
Ideal Electric and Mfg. Co., East First St., Mansfield, Ohio  
Kato Engineering Co., Mankato, Minn.  
Katolight Corp., First Ave. at Chestnut (P. O. Box 891), Mankato, Minn.  
Leland Electric Co., 1501 Webster St., Dayton 1, Ohio  
Lincoln Electric Co., 22801 St. Clair Ave., Cleveland 17, Ohio  
Lindberg Engineering Co., 2450 W. Hubbard St., Chicago 12, Ill.  
Marathon Electric Corp., Wausau, Wis.  
Motorsearch Co., 1600 Junction Ave., Racine, Wis.  
Newman Industries (America) Inc., 43 Broad St., New York 4, N. Y.  
Onan & Sons Inc., D. W., University Ave. S. E., at 25th, Minneapolis 14, Minn.  
Reliance Electric & Engineering Co., 1068 Ivanhoe Rd., Cleveland 10, Ohio  
Safety Car Heating and Lighting Co., Inc., P. O. Box 904, New Haven 4, Conn.  
Small Motors Inc., 2076 Elston Ave., Chicago 14, Ill.  
Star-Kimble Motor Div., Miehle Printing Press & Mfg. Co., 200 Bloomfield Ave., Bloomfield, N. J.  
Tocco Div., Ohio Crankshaft Co., 3800 Harvard Ave., Cleveland 1, Ohio  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.

MOTORS (Classified as to Application)

1. Brake
2. Phonograph
3. Sewing Machine
4. Timing, Read-Controlled
5. Vehicle, Battery-Operated

Alliance Mfg. Co., Lake Park Blvd., Alliance, Ohio (2)  
Allis Co., Louis, 427 E. Stewart St., Milwaukee 7, Wis. (1)  
Anglo Corp., 2037 W. Division St., Chicago 22, Ill. (4)  
Baldor Electric Co., 4353 Duncan Ave., St. Louis 10, Mo. (5)  
Barber-Colman Co., P. O. Drawer 99, 1300 Rock St., Rockford, Ill. (2)  
Brown Boveri Corp., 19 Rector St., N. Y. 6, N. Y. (1, 2)  
Brown-Brockmeyer Co., 1000 S. Smithville Rd., Dayton 1, Ohio (1)  
Crocker-Wheeler Div., Elliott Co., Ampere, N. J. (1)  
Crown Controls Co., Inc., 40-44 S. Washington St., New Bremen, Ohio (2)  
Dalmotor Co., 1375 Clay St., Santa Clara, Calif. (1)  
Dayton Electric Mfg. Co., 126 S. Oakley Blvd., Chicago 12, Ill. (3)  
Electro Engineering Products Co., Inc., 609 W. Lake St., Chicago 6, Ill. (3)  
Electric Specialty Co., 211 South St., Stamford, Conn. (1, 5)  
Elliott Co., Jeannette, Pa. (1)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 3, 5)  
Haydon Co., A. W., 232 N. Elm St., Waterbury, Conn. (5)  
Hertner Electric Co., 12690 Elmwood Ave., Cleveland 11, Ohio (5)  
Howard Industries Inc., 1760 State St., Racine, Wis. (1, 2, 3, 4, 5)  
Howell Electric Motors Co., 409 N. Roosevelt, Howell, Mich. (1)  
Lima Electric Motor Co., Findlay Road, Lima, Ohio (1)  
Lincoln Electric Co., 22801 St. Clair Ave., Cleveland 17, Ohio (1, 3)  
Marathon Electric Mfg. Corp., Wausau, Wis. (1)  
Merkle-Korff Gear Co., 213 N. Morgan St., Chicago 7, Ill. (1)  
Motor Specialty, Inc., 1331 10th St., Racine, Wis. (3)  
Oster Mfg. Co., John, 1 Main St., Racine, Wis. (3)  
Peerless Electric Co., 1401 W. Market St., Warren, Ohio (1, 5)  
Redmond Co., Inc., Owosso, Mich. (5)  
Reliance Electric & Engineering Co., 1068 Ivanhoe Rd., Cleveland 10, Ohio (1)  
Reuland Electric Co., 3001 W. Mission Rd., Alhambra, Calif. (1)  
Shelby Electric, Inc., 636 S. Noble St., Shelbyville, Ind. (1)  
Standard Electric Div., Standard Dayton Corp., P. O. Box 1001, Dayton 1, Ohio (1)  
Star-Kimble Motor Div., Miehle Printing Press & Mfg. Co., 20 Bloomfield Ave., Bloomfield, N. J. (1)  
Sterling Electric Motors, Inc., 5401 Telegraph Rd., Los Angeles 22, Calif. (1)  
Techniflex Corp., 55 Jersey Ave., Port Jervis, N. Y. (1)

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**Performance-Rated**  
*Century* Line

**POLYPHASE . . . Squirrel Cage Induction**  
— $\frac{1}{4}$  to 400 H.P. . . . Wound Rotor  
Motors—1 to 400 H.P. . . . Synchronous  
Motors—20 to 150 H.P.

**SINGLE PHASE . . . Split Phase Induction**  
— $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$  H.P. . . . Capacitor— $\frac{1}{2}$  to  
20 H.P. . . . Repulsion Start, Brush Lift-  
ing . . . Induction— $\frac{1}{2}$  to  $7\frac{1}{2}$  H.P.

**DIRECT CURRENT . . .  $\frac{1}{2}$  to 300 H.P. . . .**  
For All D.C. Applications.

**GEAR MOTORS . . .  $\frac{1}{2}$  to 150 H.P. . . . Sin-  
gle, Double and Triple Gear Reduction.**



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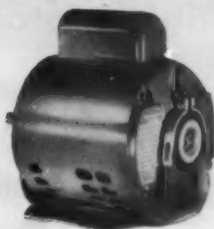
United Electric Machinery Co., 1824E N. 72 Ct.,  
Elmwood Park, Ill. (1)  
United Pressed Products Co., 741 W. Harrison St.,  
Chicago 7, Ill. (2)  
Westinghouse Electric Corp., P. O. Box 868, Pitts-  
burgh 30, Pa. (1, 2, 3)

MOTORS (Classified as to Design)

1. Battery
2. DC
3. Fractional Horsepower
4. Gear
5. Hi-Cycle
6. Miniature
7. Reciprocating
8. Self-Synchronizing
9. Single Phase
10. Special Torque
11. Squirrel Cage
12. Synchronous
13. Universal
14. Wound-Rotor, Induction

AGEC Electric Corp., 40 E. 49 St., New York 17,  
N. Y. (2, 3, 4, 9, 11, 12, 13, 14)  
Abart Gear & Machine Co., 4830 W. 16 St., Chi-  
cago 50, Ill. (4)  
Airserco Mfg. Co., Inc., 435 Melwood St., Pitts-  
burgh 13, Pa. (3)  
Alliance Mfg. Co., Lake Park Blvd., Alliance, Ohio  
(3, 6, 9, 11)  
Allis Co., Louis, 427 E. Stewart St., Milwaukee 7,  
Wis. (2, 4, 5, 9, 10, 11, 14)  
Allis-Chalmers Mfg. Co., 930 S. 70th St., Mil-  
waukee 1, Wis. (2, 4, 5, 10, 11, 12, 14)  
American Electronics, Inc., 4811 Telegraph Rd., Los  
Angeles 22, Calif. (3, 5, 6, 8, 14)  
Anglo Corp., 2037 W. Division St., Chicago 22,  
Ill. (1, 2, 4)  
●BALDOR ELECTRIC CO., 4353 Duncan Ave., St.  
Louis 10, Mo. (1, 2, 9, 11)—ADV. PG. 1  
Barber-Colman Co., P. O. Drawer 99, 1300 Rock St.,  
Rockford, Ill. (4, 6, 12)  
Bodine Electric Co., 2254 West Ohio St., Chicago  
12, Ill. (2, 3, 4, 6, 9, 12, 13)  
Bogue Electric Mfg. Co., 52 Iowa Ave., Paterson  
3, N. J. (2)  
Bristol Motor Div., Vocaline Co. of America, Inc.,  
Coulter St., Old Saybrook, Conn. (4, 6, 12)  
Brook Motor Corp., 3555 W. Peterson Ave., Chi-  
cago 45, Ill. (3, 4, 9, 10, 11, 14)  
Brown-Brockmeyer Co., 1000 S. Smithville Rd.,  
Dayton 1, Ohio (2, 3, 4, 9, 10, 11, 14)  
Brush Abco, Inc., 60-07 39th Ave., Woodside 77,  
Long Island, N. Y. (2, 10, 11, 12, 14)  
Burton Mfg. Co., 11201 W. Pico Blvd., Los Angeles  
64, Calif. (3, 6)  
Century Electric Co., 1806 Pine St., St. Louis 3,  
Mo. (1, 2, 3, 4, 8, 9, 10, 11, 12, 14)

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Standard G-E fractional-horsepower motors for industrial application have up to 50 per cent less weight and 40 per cent less bulk. Base and shell are of sturdy steel construction, will hold motor in proper alignment in any mounting position. These motors conform fully with NEMA Standards. Can be mounted in any position to take advantage of drip-proof features or space requirements. Other G-E fractional-horsepower motors available to meet your needs.

Consult classified section of phone book for address of nearest G-E Apparatus Agent-Distributor, or write direct to General Electric Co., Section 640-355A, Schenectady 5, N. Y.

**GENERAL ELECTRIC**

Chandeysson Electric Co., 4084 Bingham Ave., St. Louis 16, Mo. (12)  
 Cleveland Electric Motor Co., 5213 Chester Ave., Cleveland 3, Ohio (3, 4, 9, 10, 11, 14)  
 Columbia Electric Mfg. Co., 4519 Hamilton Ave., Cleveland 14, Ohio (12)  
 Continental Electric Co. Inc. 325 Ferry St., Newark 5, N. J. (2, 4, 11, 12, 14)  
 Cramer Co., Inc., R. W., Main St., Centerbrook, Conn. (12)  
 Crown Controls Co., Inc., 40-44 S. Washington St., New Bremen, Ohio (3)  
 Cyclo-Freez Corp., 6318 Cambridge, Minneapolis 16, Minn. (2, 3, 9, 11)  
 Dalmotor Co., 1375 Clay St., Santa Clara, Calif. (2, 3, 4, 6, 9, 12, 13)  
 Dayton Electric Mfg. Co., 126 S. Oakley Blvd., Chicago 12, Ill. (2, 3, 4, 9, 10, 11, 13, 14)  
 Delco Products Div. General Motors Corp., 330 E. 1st St., Dayton 1, Ohio (3, 9, 11)  
 DeWalt Inc., Fountain Ave., Lancaster, Pa. (3, 9, 13)  
 Diehl Mfg. Co., 1187 Finnerde Ave., Somerville, N. J. (2, 3, 9, 11, 12, 13)  
 Electric Machinery Mfg. Co., 800 Central Ave., Minneapolis 13, Minn. (11, 12, 14)  
 Electric Motors & Specialties, Inc., King & Hamsher Sts., Garrett, Ind. (3)  
 Electric Products Co., 1725 Clarkstone Rd., Cleveland 12, Ohio (2, 11, 12)  
 Electric Specialty Co., 211 South St., Stamford, Conn. (1, 2, 3, 5, 8, 9, 10, 11, 12, 14)  
 Electro Dynamic Div., General Dynamics Corp., 163 Ave. A, Bayonne, N. J. (2, 10, 11)  
 Electro Engineering Products Co., Inc., 609 W. Lake St., Chicago 6, Ill. (2, 3, 6, 13)  
 Elliott Co., Jeannette, Pa. (2, 4, 11, 12, 14)  
 Emerson Electric Mfg. Co., 8100 Florissant Ave., St. Louis 21, Mo. (2, 3, 9, 11)  
 Fairbanks, Morse & Co., 600 S. Michigan Ave., Chicago 5, Ill. (2, 4, 9, 10, 11, 12, 14)  
 Fairchild Camera & Instrument Corp., Fairchild Industries Div., 130 Main St., Burlington, Vt. (2, 3, 8, 12, 13)  
 Falk Corp., 3022 W. Canal St., Milwaukee 6, Wis. (4)  
 Foote Bros. Gear & Machine Corp., 4545 S. Western Blvd., Chicago 9, Ill. (4)  
 Franklin Electric Co. Inc., 400 E. Spring St., Bluffton, Ind. (3, 4, 9, 10, 11)  
 Friedrich Refrigerators, Inc., 117 E. Commerce St., San Antonio 3, Tex. (3, 13)  
 General Armature & Mfg. Co., P. O. Box 370, Lock Haven, Pa. (2, 3, 13, 14)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14)  
 General Electric Co., Ashland, Mass. (6, 8, 12)  
 Gilbert Co., A. C., Erector Square, New Haven 6, Conn. (6)

Globe Industries, Inc., 1784 Stanley Ave., Dayton 4, Ohio (2, 3, 6, 9, 10, 12)  
 ● GRAYBAR ELECTRIC CO., INC., 420 Lexington Ave., N. Y. 17, N. Y. (9)—ADV. PG. 2  
 Haft & Sons, Inc., 950 Kent Ave., Brooklyn 5, N. Y. (1)  
 Hansen Mfg. Co., Inc., RR # 1, Princeton, Ind. (2, 12)  
 Haydon Co., A. W., 232 N. Elm St., Waterbury, Conn. (1, 2, 4, 5, 6, 12)  
 Hertner Electric Co., 12690 Elmwood Ave., Cleveland 11, Ohio (1, 2, 3, 5, 6, 11, 12)  
 Holtzer-Cabot Div., National Pneumatic Co., Inc., 125 Amory St., Boston 19, Mass. (2, 3, 4, 5, 6, 9, 10, 11, 12)  
 Hoover Co., Electric Motor Div., 68 Brook Ave., N. Plainfield, N. J. (3, 9, 11)  
 Howard Industries Inc., 1760 State St., Racine, Wis. (1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14)  
 Howell Electric Motors Co., 409 N. Roosevelt, Howell, Mich. (3, 4, 3, 7, 9, 10, 11, 12, 14)  
 Ideal Electric and Mfg. Co., East First St., Mansfield, Ohio (2, 11, 12, 14)  
 International Register Co., 2620 W. Washington Blvd., Chicago 12, Ill. (3, 12)  
 Iron Fireman Mfg. Co., 3170 W. 106 St., Cleveland 11, Ohio (3)  
 Iron Fireman Mfg. Co., Electronics Div., 2838 S. E. 9th Ave., Portland 2, Ore. (3, 6, 9)  
 Iron Fireman Mfg. Co., Electronics Div., 2838 S. E. 9th Ave., Portland 2, Ore. (3, 6, 9, 11)  
 Janette Electric Mfg. Co., Lehigh at Main Sts., Morton Grove, Ill. (4)  
 Kato Engineering Co., Mankato, Minn. (2, 9, 14)  
 Katapult Corp., First Ave. at Chestnut (P. O. Box 891), Mankato, Minn. (2, 5, 9, 11, 13)  
 King-Wyke, Inc., Archbold, Ohio (9, 11)  
 Kurz & Root Co., Inc., 232 E. North Island St., Appleton, Wis. (2, 9, 11)  
 Lamb Electric Co., Lake St., Kent, Ohio (2, 3, 4, 9, 13)  
 Le John Mfg. Co., Inc., 111 Twenty-Second St., Huntington, W. Va. (3)  
 Leland Electric Co., 1501 Webster St., Dayton 1, Ohio (2, 3, 9, 10, 11, 14)  
 Lima Electric Motor Co., Findlay Road, Lima, Ohio (3, 4, 9, 11)  
 Link-Belt Co., 307 N. Michigan Ave., Chicago 1, Ill. (4)  
 Marathon Electric Mfg. Corp., Wausau, Wis. (2, 3, 4, 9, 10, 11, 12, 14)  
 Master Electric Co., 126 Davis Ave., Dayton 1, Ohio (2, 3, 4, 9, 10, 11, 12, 14)  
 McMillan Mfg. Co., 310 Broadway, St. Paul 1, Minn. (3)  
 Merkle-Korff Gear Co., 213 N. Morgan St., Chicago 7, Ill. (3, 6, 9, 10, 12)  
 Moore Co., P. O. Box 194, St. Louis 5, Mo. (9, 11)  
 Motoresearch Co., 1600 Junction Ave., Racine, Wis. (3, 4, 5, 11)  
 Newman Industries (America) Inc., 43 Broad St., New York 4, N. Y. (3, 4, 9, 10, 11, 12, 14)  
 Oster Mfg. Co., John, 1 Main St., Racine, Wis. (2, 3, 9, 13, 14)  
 Packard Electric Div., General Motors Corp., Warren, Ohio (3)  
 Peerless Electric Co., 1401 W. Market St., Warren, Ohio (1, 2, 3, 9, 10, 11, 12)  
 Penwood Numechron Co., 7249 Frankstown Ave., Pittsburgh 8, Pa. (8, 12)  
 Piqua Machine & Mfg. Co., 441 S. College St., Piqua, Ohio (2, 3)  
 Quick Charge, Inc., 1750 N. E. 10th St., Oklahoma City 4, Okla. (11, 13)  
 Redmond Co., Inc., Owosso, Mich. (1, 2, 3, 6, 9, 11, 13)  
 Reliance Electric & Engineering Co., 1068 Ivanhoe Rd., Cleveland 10, Ohio (2, 4, 10, 11, 14)  
 Reuland Electric Co., 3001 W. Mission Rd., Alhambra, Calif. (3, 4, 9, 10, 11, 12, 14)  
 Reynolds Electric Co., 3000 River Rd., River Grove, Ill. (3, 9, 11)  
 Ripley Co., Inc., Factory St., Middleton, Conn. (3, 9, 13)  
 Robbins & Myers, Inc., 1345 Lagonda Ave., Springfield, Ohio (2, 3, 5, 6, 9, 11, 12, 13)  
 Safety Car Heating and Lighting Co., Inc., P. O. Box 904, New Haven 4, Conn. (2, 3)  
 Sangamo Electric Co., 11th & Converse, Springfield, Ill. (3)  
 Shelby Electric, Inc., 636 S. Noble St., Shelbyville, Ind. (3, 9, 10, 11, 12)  
 Small Motors Inc., 2076 Elston Ave., Chicago 14, Ill. (1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14)  
 SpeedWay Mfg. Co., 1834 S. 52 Ave., Cicero 50, Ill. (3, 4, 6, 9, 13)  
 Standard Electric Div., Standard Dayton Corp., P. O. Box 1001, Dayton 1, Ohio (1, 2, 3, 4, 9, 10, 11)  
 Star-Kimble Motor Div., Miehle Printing Press & Mfg. Co., 200 Bloomfield Ave., Bloomfield, N. J. (1, 2, 4, 5, 9, 10, 11, 14)  
 Sterling Electric Motors, Inc., 5401 Telegraph Rd., Los Angeles 22, Calif. (4, 9, 10, 11, 14)  
 Sutton Corp., O. A., 1812 W. Second, Wichita, Kans. (3)  
 Trombetta Solenoid Corp., 329 N. Milwaukee St., Milwaukee 2, Wis. (7)  
 United Electric Machinery Co., 1824E N. 72 Ct., Elmwood Park, Ill. (2, 4, 9, 10, 11, 12, 14)  
 United Pressed Products Co., 741 W. Harrison St., Chicago 7, Ill. (4, 6)  
 U. S. Electrical Motors, Inc., 200 E. Slauson Ave., Los Angeles 54, Calif. (3, 4, 9, 10, 11)  
 Universal Electric Co., 300 E. Main St., Owosso, Mich. (2, 3, 9, 11)  
 Viber Co., 726 S. Flower St., Burbank, Calif. (13)  
 Wagner Electric Corp., 6400 Plymouth Ave., St. Louis 14, Mo. (3, 9, 10, 11, 14)

**GE**  
**MOTORS**  
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- AC Squirrel cage
- AC Synchronous
- All types—AC and DC

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- WESTINGHOUSE ELECTRIC SUPPLY CO., 40 Wall St., New York 5, N. Y. (3, 11)—ADV. PG. SECOND COVER

## MOTORS (Classified as to Enclosure)

1. Hazardous Location
2. Hermetic
3. Splash-Proof
4. Totally-Enclosed

ACEC Electric Corp., 40 E. 49 St., New York 17, N. Y. (1, 2, 3, 4)  
 Allis Co., Louis, 427 E. Stewart St., Milwaukee 7, Wis. (1, 2, 3, 4)  
 Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (1, 3, 4)  
 American Electronics, Inc., 4811 Telegraph Rd., Los Angeles 22, Calif. (1, 2, 3, 4)  
 ● BALDOR ELECTRIC CO., 4353 Duncan Ave., St. Louis 10, Mo. (1, 4)—ADV. PG. 1  
 Bogue Electric Mfg. Co., 52 Iowa Ave., Paterson 3, N. J. (3, 4)  
 Brook Motor Corp., 3555 W. Peterson Ave., Chicago 45, Ill. (1, 3, 4)  
 Brown Boveri Corp., 19 Rector St., N. Y. 6, N. Y. (1, 3, 4)  
 Brown-Brockmeyer Co., 1000 S. Smithville Rd., Dayton 1, Ohio (1, 3, 4)  
 Brush Aboe, Inc., 60-07 39th Ave., Woodside 77, Long Island, N. Y. (1, 3, 4)  
 Century Electric Co., 1806 Pine St., St. Louis 3, Mo. (1, 2, 3, 4)  
 Cleveland Electric Motor Co., 5213 Chester Ave., Cleveland 3, Ohio (4)  
 Continental Electric Co. Inc., 325 Ferry St., Newark 5, N. J. (1, 3, 4)  
 Crocker-Wheeler Div., Elliott Co., Ampere, N. J. (1, 3, 4)  
 Cyclo-Freez Corp., 6318 Cambridge, Minneapolis 16, Minn. (2, 4)  
 Dalmotor Co., 1375 Clay St., Santa Clara, Calif. (1, 2, 3, 4)  
 Dayton Electric Mfg. Co., 126 S. Oakley Blvd., Chicago 12, Ill. (1, 2, 3, 4)  
 Delco Products Div., General Motors Corp., 330 E. 1st St., Dayton 1, Ohio (2, 4)  
 Diehl Mfg. Co., 1187 Finnerde Ave., Somerville, N. J. (1, 3, 4)  
 Electric Machinery Mfg. Co., 800 Central Ave., Minneapolis 13, Minn. (3, 4)  
 Electric Motors & Specialties, Inc., King & Hamsher Sts., Garrett, Ind. (4)  
 Electric Products Co., 1725 Clarkstone Rd., Cleveland 12, Ohio (3, 4)  
 Electric Specialty Co., 211 South St., Stamford, Conn. (4)



Electro Dynamic Div., General Dynamics Corp., 163 Ave. A, Bayonne, N. J. (3, 4)  
 Electro Engineering Products Co., Inc., 609 W. Lake St., Chicago 6, Ill. (4)  
 Elliott Co., Jeannette, Pa. (1, 3, 4)  
 Emerson Electric Mfg. Co., 8100 Florissant Ave., St. Louis 21, Mo. (2, 3, 4)  
 Fairbanks, Morse & Co., 600 S. Michigan Ave., Chicago 5, Ill. (1, 2, 3, 4)  
 Fairchild Camera & Instrument Corp., Fairchild Industries Div., 110 Main St., Burlington, Vt. (4)  
 Franklin Electric Co., Inc., 400 E. Spring St., Bluffton, Ind. (3, 4)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 3, 4)  
 General Electric Co., Telechron Dept., Homer Ave., Ashland, Mass. (1)  
 Globe Industries, Inc., 1784 Stanley Ave., Dayton 4, Ohio (4)  
 Holtzer-Cabot Div., National Pneumatic Co., Inc., 125 Amory St., Boston 19, Mass. (4)  
 Hoover Co., Electric Motor Div., 68 Brook Ave., N. Plainfield, N. J. (4)  
 Howell Electric Motors Co., 409 N. Roosevelt, Howell, Mich. (1, 3, 4)  
 Ideal Electric and Mfg. Co., East First St., Mansfield, Ohio (4)  
 Iron Fireman Mfg. Co., 3170 W. 106 St., Cleveland 11, Ohio (4)  
 Iron Fireman Mfg. Co., Electronics Div., 2838 S. E. 9th Ave., Portland 2, Ore. (1, 3, 4)  
 Kato Engineering Co., Mankato, Minn. (3)  
 Katolight Corp., First Ave. at Chestnut (P. O. Box 891), Mankato, Minn. (3, 4)  
 King-Wyse, Inc., Archbold, Ohio (3, 4)  
 Kurz & Root Co., Inc., 232 E. North Island St., Appleton, Wis. (3)  
 Lamb Electric Co., Lake St., Kent, Ohio (1, 4)  
 Leland Electric Co., 1501 Webster St., Dayton 1, Ohio (1, 4)  
 Lima Electric Motor Co., Findlay Road, Lima, Ohio (1, 3, 4)  
 Lincoln Electric Co., 22801 St. Clair Ave., Cleveland 17, Ohio (3)  
 Marathon Electric Mfg. Corp., Wausau, Wis. (1, 3, 4)  
 Master Electric Co., 126 Davis Ave., Dayton 1, Ohio (1, 3, 4)  
 McMillan Mfg. Co., 310 Broadway, St. Paul 1, Minn. (4)  
 Moore Co., P. O. Box 194, St. Louis 5, Mo. (3)  
 Motoresearch Co., 1600 Junction Ave., Racine, Wis. (3, 4)  
 Newman Industries (America) Inc., 43 Broad St., New York 4, N. Y. (1, 4)  
 Peerless Electric Co., 1401 W. Market St., Warren, Ohio (1, 3, 4)  
 Piqua Machine & Mfg. Co., 441 S. College St., Piqua, Ohio (2)

Reliance Electric & Engineering Co., 1068 Ivanhoe Rd., Cleveland 10, Ohio (1, 3, 4)  
 Reuland Electric Co., 3001 W. Mission Rd., Alhambra, Calif. (3, 4)  
 Ripley Co., Inc., Factory St., Middletown, Conn. (4)  
 Robbins & Myers, Inc., 1345 Lagoda Ave., Springfield, Ohio (1, 3, 4)  
 Shelby Electric, Inc., 636 S. Noble St., Shelbyville, Ind. (3, 4)  
 Small Motors Inc., 2076 Elston Ave., Chicago 14, Ill. (3, 4)  
 Standard Electric Div., Standard Dayton Corp., P. O. Box 1001, Dayton 1, Ohio (1, 3, 4)  
 Star-Kimble Motor Div., Miehle Printing Press & Mfg. Co., 200 Bloomfield Ave., Bloomfield, N. J. (1, 3, 4)  
 Sterling Electric Motors, Inc., 5401 Telegraph Rd., Los Angeles 22, Calif. (3, 4)  
 United Electric Machinery Co., 1824E N. 72 Ct., Elmwood Park, Ill. (1, 3, 4)  
 U. S. Electrical Motors, Inc., 200 E. Slauson Ave., Los Angeles, Calif. (1, 3, 4)  
 Universal Electric Co., 300 E. Main St., Owosso, Mich. (4)  
 ● WAGNER ELECTRIC CORP., 6400 Plymouth Ave., St. Louis 14, Mo. (1, 2, 3, 4)—ADV. PG. 149  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2, 3, 4)

**MOTORS, Misc.**

Capacitor—see MOTORS (Classified as to Design), Single Phase; MOTORS (Classified as to Design), Fractional Horsepower  
 Switch-Operating — see MECHANISMS, Switch-Operating

**MOULDING—see RACEWAY, Metal, Surface**

**MOUNTINGS, Misc.**

Fuse—see FUSES  
 Meter—see BRACKETS  
 Transformer—see BRACKETS; PLATFORMS  
 Vibration Insulating—see BASES, Vibration Insulating; RUBBER, Sponge

**MOUNTS, Misc.**

Pole—see BANDS, Pole Stubbing  
 Vise—see BENCHES, Portable Vise

**MOUTHPIECES, Interphone — see SYSTEMS, Communicating; TELEPHONES**

**MOVEMENTS, Clock—see MOTORS (Classified as to Design), Miniature**

**MUFFLES, Furnace—see CORES, Refractory**

**MULTIBREAKERS—see BREAKERS, Circuit**

**MULTIMETERS—see METERS; TESTERS; ANALYZERS**

**N**

**NAILES, Pole Dating—see TAGS**

**NAILES, Wiring**

Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y.  
 Rodale Mfg. Co., Inc., 6th & Miner Sts., Emmaus, Pa.

**NAMEPLATES—see PLATES, Name**

**NIBBERS—see SHEARS, Metal, Motor Driven**

**NIGGERHEADS—see WINCHES, Truck**

**NEUTRALIZERS, Static Charge**

Cheston Co., Frank Co., 30 Church St., N. Y. 7, N. Y.  
 Doyle Co., J. E., 1220 W. 6th St., Cleveland 13, Ohio  
 Globe Laboratories, P. O. Box 853, Sherman Oaks, Calif.  
 Sticht Co., Inc., Herman H., 27 Park Place, New York 7, N. Y.

**NIPPLES, Conduit**

Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill.  
 Beaver Pipe Tools, Inc., 310 Dana Ave. N. E., Warren, Ohio  
 Conduit Pipe Products Co., 157 W. Fulton St., Columbus 16, Ohio  
 Electrical Fittings Corp., 37-50 57th St., Woodside 77, N. Y.  
 Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y.  
 General Steel Fittings Co., 1321 21st St., Racine, Wis.  
 ● MIDWEST ELECTRIC MFG. CO., 1639 Walnut St., Chicago 12, Ill.—ADV. PG. 104-105  
 National Electric Products Corp., Gateway Center 140 Stanwix St., Pittsburgh 22, Pa.  
 Pipe Coupling Mfrs., Inc., P. O. Box 488, Martins Ferry, Ohio

Rattan Mfg. Co., 10 Wall St. (P. O. Box 1745), New Haven 7, Conn.  
 Richards Co., J. R., P. O. Box 482, Carnegie, Pa.  
 Spang-Chalfant Div., National Supply Co., Two Gateway Center (P. O. Box 416), Pittsburgh 30, Pa.  
 Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa.  
 Tomic Sales & Engineering Co., 20000 Sherwood Ave., Detroit 34, Mich.

**NIPPLES, Fixture—see FITTINGS, Fixture**

**NOZZLES, Fixture—see FITTINGS, Fixture**

**NOZZLES, Floor Box**

Fullman Mfg. Co., 1209-1215 Jefferson St., Latrobe, Pa.  
 Richards Co., J. R., P. O. Box 482, Carnegie, Pa.  
 Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa.

**NUTS**

1. Brass
2. Castellated
3. Copper
4. Copper-Nickel Alloy
5. Eye
6. Iron
7. Self-Locking
8. Silicon Bronze
9. Steel
10. Thumb and Wing, Brass
11. Thumb and Wing, Iron

Atlas Bolt & Screw Co., 1130 Ivanhoe Rd., Cleveland 10, Ohio (1, 2, 9)  
 Atlas Screw & Specialty Co., 450 Broome St., N. Y., N. Y. (1, 2, 6, 7, 8, 9, 10, 11)  
 Allmetal Screw Products Co., Inc., Garden City, N. Y. (9)  
 Bethlehem Steel Co., Bethlehem, Pa. (9)  
 Billings & Spencer Co., 1 Laurel St., Hartford 1, Conn. (9, 10)  
 Blackhawk Industries, 250 S. Main St., Dubuque, Iowa (1, 9)  
 Burndy Engineering Co. Inc., Norwalk, Conn. (8)  
 Columbia Nut & Bolt Co., Inc., 945 Main St., Bridgeport 3, Conn. (1, 2, 3, 4, 7, 8, 9)  
 Dasset Mfg. Corp., 249-255 Huron St., Brooklyn 22, N. Y. (8)  
 Electrical Mfg. Co., Box 217, Battle Creek, Mich. (5, 6)  
 Federal Screw Products, Inc., 3917-25 N. Kedzie Ave., Chicago 18, Ill. (1, 2, 3, 4, 6, 7, 9, 10, 11)  
 Hallett Mfg. Co., 1601 W. Florence Ave., Inglewood, Calif. (1)

**conduit of columbus**



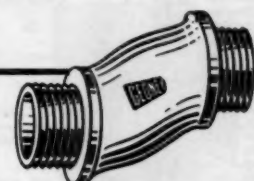
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 money-saving connections

Conduit hot-dipped galvanized nipples are carefully threaded and chamfered, rigidly inspected and U.L. approved. Available in all sizes for prompt shipment from factory or ten strategically located warehouses. Sizes: ½" x close to 2" x 6" are all attractively packaged. Larger sizes 2½" to 6", in various lengths, also available.

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*Conduit* COLUMBUS, OHIO

**SOLD ONLY THROUGH WHOLESALERS**



**GEDNEY  
 OFFSET NIPPLES**  
 Quickest, easiest  
 to install

Gedney Offset Nipples have a ¾" offset, and come in six sizes ranging from ½" to 2". Accurately machined and threaded, they cut your installation time and costs. They're made of unbreakable malleable iron... cadmium plated for maximum life on every application.

**Gedney Fittings FIT**

**GEDNEY  
 ELECTRIC COMPANY**



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 Terryville, Conn.

## PRODUCT DIRECTORY

Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif. (2, 5, 9)  
 Line Material Co., 700 West Michigan St., Milwaukee, Wis. (5, 7)  
 Metalcraft, Inc., 677 Broadway, N. Y. 12, N. Y. (6)  
 Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (5, 9)  
 Palmot Co. 61 Cordier St., Irvington 11, N. J. (7, 8, 9)  
 St. Louis Screw & Bolt Co., 6900 N. Broadway, St. Louis 15, Mo. (1, 2, 6, 8, 9, 11)  
 Saylor Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa. (5, 9)  
 Shakaproof Div., Illinois Tool Works, St. Charles Rd., Elgin, Ill. (7)  
 Steel Co., Herman D., 325 Lafayette Bldg., Phila. 6, Pa. (1, 9)  
 Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (6, 9)  
 Thompson-Bremer & Co., 520 N. Dearborn St., Chicago 10, Ill. (7)  
 Timmerman Products, Inc., Dept. 16, P. O. Box 6688, Cleveland 3, Ohio (7, 9)  
 Utilities Service Co., 1 Pine St., Allentown, Pa. (5, 9)  
 Western Automatic Machine Screw Co., P. O. Box 280, Elyria, Ohio (1, 2, 6, 9)  
 Yorkville Metal Products Co., 677 Broadway, N. Y. 12, N. Y. (1, 6, 10, 11)

### NUTS, Misc.

Wire—see **CONNECTORS**, Cable and Wire, Pressure, Insulated  
 See also **SCREWS**

## O

### OHMMETERS

Associated Research, Inc., 3758 W. Belmont Ave., Chicago 18, Ill.  
 Communication Measurements Lab., Inc., 350 Leland Ave., Plainfield, N. J.  
 Dice Co., J. W., Englewood, N. J.  
 EPDC Electronics, Inc., 140 Liberty St., N. Y. 6, N. Y.  
 Electronic Instrument Co., Inc., 84 Withers St., Brooklyn 11, N. Y.  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
 General Electronic Distributing Co., 98 Park Pl., New York 7, N. Y.  
 Gray Instrument Co., 64 W. Johnson St., Phila. 44, Pa.  
 Hewlett-Packard Co., 395 Page Mill Rd., Palo Alto, Calif.  
 Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland 8, Ohio  
 Holtzer-Cabot Div., National Pneumatic Co., Inc., 125 Amory St., Boston 19, Mass.  
 Industrial Instruments Inc., 89 Commerce Rd., Cedar Grove, N. J.  
 Instrument Laboratories, 315 W. Walton Pl., Chicago 10, Ill.  
 Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio  
 Meters, Inc., 5353 N. Keystone Ave., Indianapolis 20, Ind.  
 Philco Corp., Tigra & C Sts., Phila. 34, Pa.  
 Proto Tools, Box 3519 Terminal Annex, Los Angeles 54, Calif.  
 Radio City Products Co., Inc., Centre and Glendale Sts., Easton, Pa.  
 Roller-Smith Corp., 1000 8th Ave., Bethlehem, Pa.  
 Sensitive Research Instrument Corp., 9 Elm Ave., Mount Vernon, N. Y.  
 Shallcross Mfg. Co., 33 Lincoln Ave., Collingdale, Pa.  
 Simpson Electric Co., 5200 W. Kinzie St., Chicago 44, Ill.  
 Southwestern Industrial Electronics Co., 2831 Post Oak Rd. (P. O. Box 13058), Houston 19, Tex.  
 Stewart Bros. Div., Instrument Laboratories, 315 W. Walton Pl., Chicago 10, Ill.  
 Sticht Co., Inc., Herman H., 27 Park Place, N. Y. 7, N. Y.  
 Telectro Industries Corp., 35-16 37th St., Long Island City 1, N. Y.  
 Technology Instrument Corp., 531 Main St., Acton, Mass.  
 Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio  
 Weston Electrical Instrument Corp., 614 Freyhuisen Ave., Newark 5, N. J.

### OILERS, Motor

Co-operative Utilities Co., Inc., 4637-39 Mulberry St., Phila. 24, Pa.  
 Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio  
 Trico Fuse Mfg. Co., 2948 No. 9th St., Milwaukee 12, Wis.

### OILS

1. Lubricating
  2. Transformer and Circuit Breaker
- Beaver Pipe Tools, Inc., 310 Dana Ave. N. E., Warren, Ohio (1)  
 Dow Corning Corp., P. O. Box 592, Midland, Mich. (1)  
 General Electric Co., Chemical & Metallurgical Div., Waterford, N. Y. (1)  
 Gulf Refining Co., Gulf Oil Corp., 1822 Gulf Bldg., Pittsburgh 30, Pa. (1, 2)

Lubriplate Div., Fiske Brothers Refining Co., 129 Lockwood St., Newark 5, N. J. (1)  
 National Specialties Co., Inc., 1902 Howell St., Ft. Wayne 7, Ind. (1)  
 Ohio Grease Co., 515-519 N. Spring St., Loudonville, Ohio (1)

### OILS, Misc.

Creosote—see **COMPOUNDS**, Wood Preservative  
 Soldering—see **FLUX**, Soldering

### OPERATORS, Door and Gate

1. Electromagnetic
  2. Motor-Operated
- Alliance Mfg. Co., Lake Park Blvd., Alliance, Ohio (2)  
 Crane Co., H. W., 15 N. 9th Ave., Maywood, Ill. (2)  
 Dor-O-Matic Div., Republic Industries, Inc., 4446 N. Knox Ave., Chicago 30, Ill. (2)  
 Electric Power Door Co., 2127 E. Lake St., Minneapolis 7, Minn. (2)  
 National Pneumatic Co., Inc., 125 Amory St., Boston 19, Mass. (2)  
 Peeble Co., 47 Stewart Ave., Brooklyn 37, N. Y. (2)  
 Quincy Mfg. Co., Box 916, Tiffin, Ohio (2)  
 Robot Appliances, Inc., 7041 Orchard St., Dearborn, Mich. (1, 2)

### OPERATORS, Valve—see VALVES

### OSCILLOSCOPES

Browning Laboratories, Inc., 750 Main St., Winchester, Mass.  
 Central Scientific Co., 1700 Irving Pk. Rd., Chicago 13, Ill.  
 DuMont Laboratories, Inc., Allen B., 750 Bloomfield Ave., Clifton, N. J.  
 El-Tronics, Inc., 437 N. Fifth St., Phila. 23, Pa.  
 Electronic Instrument Co., Inc., 84 Withers St., Brooklyn 11, N. Y.  
 General Electric Co., Electronics Div., Electronics Park, Syracuse, N. Y.  
 Heath Co., 305 Territorial, Benton Harbor, Mich.  
 Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland 8, Ohio  
 Jackson Electrical Instrument Co., 18 S. Patterson Blvd., Dayton 2, Ohio  
 Philco Corp., Tigra & C Sts., Phila. 34, Pa.  
 Radio City Products Co., Inc., Centre and Glendale Sts., Easton, Pa.  
 Simpson Electric Co., 5200 W. Kinzie St., Chicago 44, Ill.  
 Sylvania Electric Products, Inc., 1740 Broadway, N. Y. 19, N. Y.  
 Tektronix, Inc., P. O. Box 831, Portland 7, Ore.  
 Telectro Industries Corp., 35-16 37th St., Long Island City 1, N. Y.  
 Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio  
 Waterman Products Co., Inc., 2445-63 Emerald St., Phila. 25, Pa.  
 Weston Electrical Instrument Corp., 614 Freyhuisen Ave., Newark 5, N. J.

### OUTLETS, Hanger

Adam Electric Co., Frank, P. O. Box 357, St. Louis, Mo.  
 Burbank Electrical Products, 215 W. Palm Ave., P. O. Box 7, Burbank, Calif.  
 Hubbell Inc., Harvey, State & Bostwick Ave., Bridgeport 2, Conn.  
 Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill.  
 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif.  
 Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y.

### OUTLETS, Misc.

Convenience—see **RECEPTACLES**, Plug, Convenience  
 Floor—see **BOXES**, Wiring Device, Floor  
 Heavy Duty—see **PLUGS**, Heavy Duty

Radio or Telephone—see **JACKS**, Telephone, Wall Receptacle

### OVENS

1. Baking and Roasting, Commercial
2. Baking and Roasting, Household
3. Baking and Roasting, Household, Built-in
4. Baking, Coil and Armature
5. Infrared

Acme Electric Heating Co., 1217 Washington St., Boston 18, Mass. (4)  
 Active Specialty Corp., 302 N. Water St., Newburgh, N. Y. (3)  
 Ambory Corp., 21321 Stephenson Highway, Hazel Park, Mich. (4)  
 Coates Electric Mfg. Co., 3419-11th Ave. S. W., Seattle 4, Wash. (1, 4)  
 Cooper Co., D. C., 1467 S. Michigan Ave., Chicago 5, Ill. (5)  
 Corona Equipment Co., Inc., 5210 San Fernando Rd., Glendale 3, Calif. (1, 4, 5)  
 Electric Hotpack Co., Inc., Cottman Ave. at Melrose St., Phila. 35, Pa. (4, 5)  
 Fostoria Pressed Steel Corp., N. Main St., Fostoria, Ohio (1, 4, 5)  
 Griveau-Hendry Co., Inc., 1401-17 W. Carroll Ave., Chicago 7, Ill. (1, 4, 5)  
 Holland & Sons, Inc., J., 475 Keap St., Brooklyn 11, N. Y. (1)  
 Hotpoint Co., Commercial Equipment Dept., 227 South Seeley Ave., Chicago 12, Illinois (1)  
 Hotpoint Co., 5600 W. Taylor St., Chicago 44, Ill. (1, 3)  
 Huppert Co., K. H., 6830 S. Cottage Grove Ave., Chicago 37, Ill. (4)  
 Jensen Specialties, Inc., 9331 Freeland Ave., Detroit 28, Mich. (4, 5)  
 Koch Sons, Inc., George, P. O. Box 358, Evansville, Ind. (4)  
 Michigan Oven Co., 415 Brainard, Detroit 1, Mich. (4)  
 Miskella Infra-Red Co., E. 73rd & Grand Ave., Cleveland 4, Ohio (4, 5)  
 Op-Al Electric & Mfg. Co., 809 N. Senate Ave., Indianapolis 2, Ind. (5)  
 Pereny Equipment Co., 893 Chambers Rd. (Station A, Box 153), Columbus, Ohio (4)  
 Perfection Industries, Inc., 7609 Platt Ave., Cleveland 4, Ohio (2)  
 Potter & Rayfield, Inc., P. O. 1042, Atlanta, Ga. (4)  
 Preway Inc., 1430 Second St. North, Wisconsin Rapids, Wis. (3)  
 Seabreeze Engineering Co., Inc., 8500 E. Garvey Ave. (P. O. Box 8), South San Gabriel, Calif. (1, 2, 3)  
 Steiner-Ives Co., Springfield Rd., Union, N. J. (1, 4, 5)  
 Thermador Electrical Mfg. Co., 5119 District Blvd., Los Angeles 22, Calif. (3)  
 Triangle Equipment Co., Inc., 45 River Rd., Nutley 10, N. J. (5)  
 Washington Stove Works, 3402 Smith Ave. (P. O. Box 919), Everett, Wash. (1)  
 Westinghouse Electric Corp., Electric Appliance Div., 246 E. Fourth St., Mansfield, Ohio (3)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (2)  
 Wil-Son Mfg. Co., Cloverport, Ky. (4, 5)  
 Young & Berke Co., 2277 Buck St., Cincinnati 22, Ohio (4)  
 Young Bros. Co., 1831 Columbus Rd., N. W., Cleveland 13, Ohio (4)

**OZONATORS—see GENERATORS, Ozone; FIXTURES, Lighting, Special Purpose**



## P

### PACKING, Pump

Auburn Mfg. Co., Pease Ave. & Stack St., Middletown, Conn.  
 Chicago Rawhide Mfg. Co., 1301 Elston Ave., Chicago 22, Ill.  
 Crane Packing Co., 1800 Cuyler Ave., Chicago 13, Ill.



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**Frank Adam Electric Co.**

MAIN P. O. BOX 357 • ST. LOUIS 3, MO.

Excelsior Leather Washer Mfg. Co., Inc., 720 Chestnut St., Rockford, Ill.  
Felt Products Mfg. Co., 1514 Carroll Ave., Chicago 7, Ill.  
New York Belting & Packing Co., 1 Market St., Passaic, N. J.  
Spaulding Fibre Co., Inc., 310 Wheeler St., Tonawanda, N. Y.

#### PADS, Heating

Battle Creek Equipment Co., 32 N. Washington St., Battle Creek, Mich.  
Casco Products Corp., 512 Hancock Ave., Bridgeport, Conn.  
General Electric Co., Small Appliance Div., 1285 Boston Ave., Bridgeport 2, Conn.  
Kirk & Blum Mfg. Co., 3120 Forrer St., Cincinnati 9, Ohio (2)  
Landers, Frary & Clark, 47 Center St., New Britain, Conn.  
Mine Safety Appliances Co., 201 N. Braddock Ave., Pittsburgh 8, Pa.  
Russell & Stoll Co., Inc., 125 Barclay St., New York 7, N. Y. (1)  
Westinghouse Electric Supply Co., 40 Wall St., New York 5, N. Y. (2)

PADS, Moving—see COVERS, Appliance

PAIRS, Canvas—see BUCKETS

#### PAINT

1. Acid Resistant
2. Conducting
3. Fire Resistant and Retardant
4. Insulating
5. Metal
6. Tree

Bartlett Mfg. Co., 3003 E. Grand Blvd., Detroit 2, Mich. (6)  
Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y. (4)  
Bisonite Co., Inc., P. O. Box 84, Kenmore Station, Buffalo 17, N. Y. (1, 3, 4, 5, 6)  
Borthing Co., Inc., Geo. C., P. O. Box 115 B, East Rutherford, N. J. (4)  
Central Paint & Varnish Works Inc., 59 Prospect St., Brooklyn 1, N. Y. (1, 3, 5)  
Charleston Rubber Co., Stark Industrial Park, Charleston, S. C. (1, 5)  
Ferrubron Metal Paint Co., 528 W. Highland Ave., Milwaukee 3, Wis. (1, 5, 6)  
Fidelity Chemical Products Corp., 470 Frelinghuysen Ave., Newark 5, N. J. (2)  
Irvington Varnish and Insulator Div., Minnesota Mining and Mfg. Co., 6 Argyle Terrace, Irvington 11, N. J. (1, 4)  
Javex, P. O. Box 646, Redlands, Calif. (2)  
Koppers Co., Inc., Koppers Bldg., Pittsburgh 19, Pa. (1, 3, 4, 5)  
Midland Paint & Varnish Co., 3801 E. 91st St., Cleveland 5, Ohio (1, 4, 5)  
National Lead Co., 111 Broadway, N. Y. 6, N. Y. (5)  
Nukem Products Corp., 111 Colgate Ave., Buffalo 20, N. Y. (1)  
Sauereisen Cements Co., 1045 N. Canal St., Pittsburgh 15, Pa. (1, 2, 3, 4)  
Sherwin-Williams Co., 101 Prospect Ave., N. W., Cleveland 1, Ohio (1, 2, 3, 4, 5)  
Subox, Inc., Fairmount Plant, Hackensack, N. J. (1, 2, 5)  
United Chromium, Inc., 100 East 42 St., New York 17, N. Y. (1, 4, 5)  
Wilbur & Williams Co., Boston, Mass. (1, 3, 5)

#### PANELBOARDS

1. Hazardous Location
2. Standard

Adam Electric Co., Frank, P. O. Box 357, St. Louis, Mo. (1, 2)  
American Electric Switch Div., Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (2)  
Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. (1)  
Associated Lighting Service, 876 Kayne St., Redwood City, Calif. (2)  
Automatic Temperature Control Co., Inc., 5212 Pulaski Ave., Phila. 44, Pa. (1, 2)  
Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland 10, Ohio (1, 2)  
Barber Electric Mfg. Co., Inc., 30 Chestnut St., N. Attleboro, Mass. (2)  
Barber-Colman Co., P. O. Drawer 99, 1300 Rock St., Rockford, Ill. (2)  
Bristol Co., Waterbury 20, Conn. (1, 2)  
Bulldog Electric Products Co., 7610 Joseph Campau, Detroit, Mich. (2)  
Canadian Radium & Uranium Corp., 630 Fifth Ave., New York 20, N. Y. (2)  
Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (2)  
Cleveland Switchboard Co., 2925 E. 79 St., Cleveland 4, Ohio (2)  
Coates Electric Mfg. Co., 3419 - 11th Ave. S. W., Seattle 4, Wash. (1, 2)  
Continental Electric Equipment Co., Box 1055, Cincinnati 1, Ohio (2)  
● CROUSE-HINDS CO., Syracuse 1, N. Y. (1)—ADV. PG. 116-117  
Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (1)  
Electric Products Co., 1725 Clarkstone Rd., Cleveland 12, Ohio (2)  
Empire Switchboard Co., Inc., 810 Fourth Ave., Brooklyn 32, N. Y. (2)



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*Frank Adam Electric Co.*

MAIN P. O. BOX 357 • ST. LOUIS 3, MISSOURI

Falstrom Co., 62 Falstrum Court, Passaic, N. J. (2)  
Federal Pacific Electric Co., 50 Paris St., Newark 5, N. J. (1, 2)  
General Control Co., 1200 Soldiers Field Rd., Boston 34, Mass. (2)  
General Electric Co., Distribution Assemblies Dept., 41 Woodford Ave., Plainville, Conn. (1, 2)  
General Switch Corp., 45 Reobling St., Brooklyn 11, N. Y. (2)  
● GRAYBAR ELECTRIC CO., INC., 420 Lexington Ave., N. Y. 17, N. Y. (1, 2)—ADV. PG. 2  
Gustavson, Inc., 8600 Chestnut St., Kansas City 30, Mo. (2)  
Haertel Co., Walter, 2840 4th Ave. So., Minneapolis, Minn. (2)  
Hallett Mfg. Co., 1601 W. Florence Ave., Inglewood, Calif. (1, 2)  
Hoffman Engineering Corp., Anoka, Minn. (2)  
Jensen Specialties, Inc., 9331 Freeland Ave., Detroit 28, Mich. (2)  
Kinney Electrical Mfg. Co., 678 Buckeye St., Elgin, Ill. (1, 2)  
Kirk & Blum Mfg. Co., 3120 Forrer St., Cincinnati 9, Ohio (2)  
Kolton Electric Mfg. Co., 123 New Jersey Railroad Ave., Newark 5, N. J. (2)  
Mullenbach Div., Electric Machinery Mfg. Co., 2300 E. 27 St., Los Angeles 58, Calif. (2)  
Murray Mfg. Corp., 1250 Atlantic Ave., Brooklyn 16, N. Y. (2)  
Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla. (1, 2)  
Oviatt Co., D. C., 2174 Lakeside Ave., Cleveland 14, Ohio (2)  
Panellit, Inc., 7401 N. Hamlin Ave., Skokie, Ill. (1, 2)  
Parker Electrical Mfg. Co., 221 Washington St., Oakland 7, Calif. (2)  
Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (2)  
Pyle-National Co., 1334 N. Kostner Ave., Chicago 51, Ill. (1)  
Rowan Controller Co., 2315 Homewood Ave., Baltimore 18, Md. (1)  
Royal Switchboard Co., Inc., 460 Driggs Ave., Brooklyn 11, N. Y. (2)  
Russell & Stoll Co., Inc., 125 Barclay St., New York 7, N. Y. (1)  
Scam Instrument Corp., 3909 Irving Park Rd., Chicago 18, Ill. (2)  
Square D Co., 6060 Rivard St., Detroit 11, Mich. (1, 2)  
Synthane Corp., Oaks, Pa. (2)  
Wadsworth Electric Mfg. Co., Inc., 20-34 W. 11th St., (Box 272), Covington, Ky. (2)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2)  
● WESTINGHOUSE ELECTRIC SUPPLY CO., 4th Wall St., N. Y. 5, N. Y. (2)—ADV. PG. SECOND COVER



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WHETHER it's fusible or circuit breaker type, Federal Pacific has the Lighting and Distribution Panelboards to meet your toughest requirements.

Component parts for Flexunit distribution and Type NALP lighting panelboards are obtainable direct from your wholesaler, eliminating the waiting for factory assemblies.

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ELECTRIC COMPANY**

FORMERLY FEDERAL ELECTRIC  
PRODUCTS COMPANY

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**PANELS, Lighting, Glass and Plastic**

Art Metal Co., 1814 E. 40 St., Cleveland 3, Ohio  
Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill.  
Continental-Diamond Fibre Co., Newark, Del.  
Corning Glass Works, Corning, N. Y.  
General Switch Corp., 45 Roebing St., Brooklyn 11, N. Y.  
Holograph Co., Inc., 342 Madison Ave., New York 17, N. Y.  
Louverall Lighting Corp., 1770 W. Berteau Ave., Chicago 13, Ill.  
Maymar Corp., 1961 W. 112 St., Cleveland 2, Ohio  
Mica Insulator Co., P. O. Box 1076, Schenectady 1, N. Y.  
Midco Mfg. & Distrib. Co. Inc., 1129 S. 13 St., Sheboygan, Wis.  
Molded Insulation Co., 335 E. Price St., Phila. 44, Pa.  
Plasticraft Products Co., 1 Station Plaza, West Nyack, N. Y.  
Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif.  
Sylvania Electric Products, Inc., 1740 Broadway, N. Y. 19, N. Y.  
Wama Co., Industrial Bldg., Baltimore 2, Md.

**PANELS, Misc.**

**Dimmer**—see DIMMERS; SWITCHBOARDS, **Theater**  
**Heating**—see HEATERS, Space, Electric  
**Testing**—see STRUCTURES, Mounting, Instruments; TESTERS; METERS

**PAPER**

1. Electrical Insulating  
2. Fullerboard and Pressboard  
Auburn Mfg. Co., Pease Ave., & Stack St., Middletown, Conn. (1, 2)  
Brand Dielectrics, Inc., 57 North St., Willimantic, Conn. (1, 2)  
● COTTRELL PAPER CO., INC., 80 Purchase St., Fall River, Mass. (1)—ADV. PG. 118  
General Electric Co., Chemical & Metallurgical Div., Pittsfield, Mass. (1)  
Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo. (1, 2)  
Irvington Varnish and Insulator Div., Minnesota Mining and Mfg. Co., 6 Argyle Terrace, Irvington 11, N. J. (1)  
Johns-Manville, 22 E. 40 St., New York 16, N. Y. (1)  
Keesbey & Mattison Co., Butler Ave., Ambler, Pa. (1)  
Mica Insulator Co., P. O. Box 1076, Schenectady 1, N. Y. (1)  
Mitchell Rand Insulation Co., 51 Murray St., N. Y. 7, N. Y. (1, 2)  
Penn. Fibre & Specialty Co., Inc., 2024 E. Westmoreland St., Phila. 34, Pa. (1, 2)  
Spaulding Fibre Co., Inc., 310 Wheeler St., Tonawanda, N. Y. (1, 2)  
Westinghouse Electric Corp., P. O. Box 860, Pittsburgh 30, Pa. (1)  
Wilmington Fibre Specialty Co., New Castle, Dela. (1)

**PAPER, Misc.**

**Fish**—see PAPER, Electrical Insulating  
**Mica**—see MICA  
**Oiled or Varnished**—see CAMBRIC

**PARTITIONS, Wire**—see FENCING

**PASTE, Soldering**—see FLUX, Soldering

**PEGS, Armature**—see WEDGES, Armature

**PENCILS, Misc.**

**Carbon**—see CARBONS, Battery  
**Soldering**—see IRONS, Electric, Soldering  
**Zinc**—see ZINCS, Battery

**PENDANTS, Luminous**

Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I.  
Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y.

**PERMEAMETERS** — see METERS, Electrical Measuring, Flux

**PHOTO-TUBES**—see CELLS, Photo-Electric

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General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
Macbeth Daylighting Corp., P. O. Box 950, Newburgh, N. Y.  
Techniflex Corp., 55 Jersey Ave., Port Jervis, N. Y.

**PICKUPS, Conduit Tool**

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**PIGTAILS, Braided Wire**—see CONDUCTORS, Braided Copper

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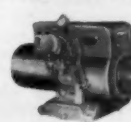
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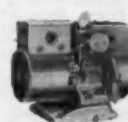
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3. Wood

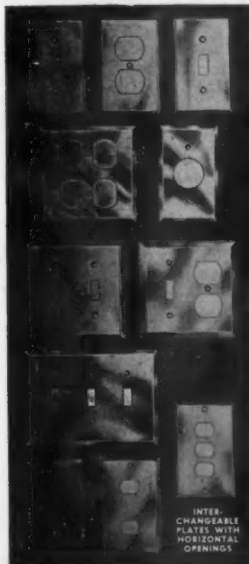
American Crossarm & Conduit Co., 7726 Sheridan Rd., Chicago 26, Ill. (3)  
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 Line Material Co., 700 West Michigan St., Milwaukee, Wis. (2)  
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 Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa. (2)  
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 Weaver Co., J. A., 2110 Howard St., St. Louis 6, Mo.

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**PLATES**

1. Data and Instruction
2. Name
3. Switch and Outlet, Flush
4. Touch
5. Wall, Gooseneck

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 Arrolet Corp., Foot of Bower St., Montgomery, Pa. (3)  
 Arrow Conduit & Fittings Corp., 129 30th St., Brooklyn 32, N. Y. (3)  
 Associated Lighting Service, 876 Kaynne St., Redwood City, Calif. (3)  
 Bell Electric Co., 1844-50 W. 21 St., Chicago 8, Ill. (3)  
 Bryant Electric Co., Box D Barnum Station, Bridgeport 2, Conn. (3)  
 Canadian Radium & Uranium Corp., 630 Fifth Ave., New York 20, N. Y. (1, 2)  
 Chicago Decalcomania Co., 3310 Elston Ave., Chicago 18, Ill. (2)  
 Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (3, 5)  
 Conduit Nipple Mfg. Co., 1455 Spring Garden Ave., Pittsburgh 12, Pa. (5)  
 Dickey-Grabler Co., 10302 Madison Ave., Cleveland 2, Ohio (1, 2)  
 Dietz Co., Henry G., 12-16 Astoria Blvd., Long Island City 2, N. Y. (1, 2)  
 Electro Dev'ns. Inc., 4025 Easton Ave., St. Louis 13, Mo. (2)  
 Gem Electric Mfg. Co., Inc., 237 37th St., Brooklyn, N. Y. (3)  
 General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn. (3)  
 Hanson Co., C. H., 303 W. Erie St., Chicago 10, Ill. (1, 2, 3)

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 Keystone Mfg. Co., 23328 Sherwood Rd., Centerline, Detroit, Mich. (3)  
 Lancaster Lens Co., Lancaster, Ohio (2)  
 Massey, Inc., A. H., 111 3rd St. (P. O. Box 206), Derby, Conn. (3)  
 Matthews & Co., James H., 3946 Forbes St., Pittsburgh 13, Pa. (1, 2)  
 Maymer Corp., 1961 W. 112 St., Cleveland 2, Ohio (2)  
 McKinley Co., Ben P., 626 W. Jackson Blvd., Chicago 6, Ill. (3)  
 Meierjohan-Wengler, 1102 W. 9th St., Cincinnati 9, Ohio (1, 2)  
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 Pass & Seymour, Inc., Syracuse 9, N. Y. (2, 3)  
 Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (2)  
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 Spero Electric Corp., 20500 St. Clair Ave., Cleveland 17, Ohio (3)  
 Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa. (3)  
 Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (3, 5)  
 Touch-Plate Mfg. Corp., 16530 Garfield, Paramount, Calif. (4)  
 United States Radium Corp., 535 Pearl St., New York 7, N. Y. (1, 2)  
 Yorkville Metal Products Co., 677 Broadway, N. Y. 12, N. Y. (3, 5)

**PLATES, Misc.**

Butt—see GUARDS, Pole Line  
 Carbon—see BRUSHES, Carbon  
 Double Arming—see BRACES, Pole Line, Crossarm  
 Flange—see FITTINGS, Pipe Structure  
 Guy—see HOOKS, Guy  
 Mica—see MICA  
 Strain—see SHIMS, Guy

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Oxwall Tool Co., Ltd., 928 Broadway, New York 10, N. Y. (1, 2, 3, 5, 6)  
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Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J. (3)

Utica Drop Forge & Tool Corp., Utica 4, N. Y. (1, 2, 3, 4, 5, 6)  
Vaco Products Co., 317 E. Ontario St., Chicago 1, Ill. (1, 2, 3, 4, 5, 6)  
Vichek Tool Co., 3001 E 87th St., Cleveland 4, Ohio (1)  
Wildie Drop Forge and Tool Co., 2936-40 Fairmount, Kansas City 8, Mo. (1, 3)  
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Wire Stripping—see **STRIPPERS**, Wire  
See also **TOOLS**

## **PLUGS, Cable—see TRENCHERS**

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3. Dummy Fuse
4. Extension Cord Connecting
5. Grounding
6. Heavy Duty
7. Multiple Tap
8. Pin
9. Polarized
10. TV Antenna Outlet

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Arrow-Hart & Hegeman Electric Co., 103 Hawthorn St., Hartford 6, Conn. (1, 6, 9)  
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Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y. (2)  
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Battery Charging—see **PLUGS**, Heavy Duty;  
**PLUGS**, Polarized  
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Radio Outlet—see **JACKS**, Telephone, Wall  
Receptacle  
Range—see **PLUGS**, Heavy Duty  
Stage—see **FIXTURES**, Lighting, Special Purpose, Stage  
See also **CAPS**; **RECEPTACLES**

**POINTS**, Contact—see **CONTACTS**, Precious Metal

**POINTS**, Drive—see **RODS**, Ground

**POLE BASES**—see **BASES**, Pole

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Haley & Co., Inc., R. G., 767 Spitzer Bldg., Toledo 4, Ohio (6)  
Koppers Co., Inc., Wood Preserving Div., Koppers Bldg., Pittsburgh 19, Pa. (1, 2, 3, 4, 5, 6)  
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National Pole & Treating Div., Minnesota & Ontario Paper Co., 500 Investors Bldg., Minneapolis 2, Minn. (1, 3, 6)  
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Poles, Inc., E. 706 Sprague Ave., Spokane 3, Wash. (1, 2, 3, 5, 6)  
Texas Cressoting Co., P. O. Box 131, Orange, Tex. (1, 4)

#### POLES, Pike

Chance Co., A. B., 210 N. Allen St., Centralia, Mo.  
Dicke Tool Co., 1201 Warren Ave., Downers Grove, Ill.  
Utilities Service Co., 1 Pine St., Allentown, Pa.

#### POLES, Steel

1. Latticed  
2. Tubular  
Elreco Corp., 2900-18 Cornany Ave., Cincinnati 25, Ohio (2)  
Millerbernd Mfg. Co., Winsted, Minn. (2)  
Phillips Co., Oscar, Box 78, Station 1, Cincinnati 29, Ohio (2)  
Revere Electric Mfg. Co., 6017 Broadway, Chicago 40, Ill. (2)  
Union Metal Mfg. Co., 1432 Maple Ave., Canton 5, Ohio (2)

#### POLISHERS, Floor

American Floor Surfacing Machine Co., 518 S. St. Clair St., Toledo 3, Ohio  
Atlas Floor Surfacing Machinery Corp., 248 E. 34 St., New York 16, N. Y.  
Birtman Electric Co., 4140 Fullerton Ave., Chicago 39, Ill.  
Breuer Electric Mfg. Co., 5100 N. Ravenswood Ave., Chicago 40, Ill.  
Clarke Sanding Machine Co., 30 E. Clay Ave., Muskegon, Mich.  
Floorola Products, Inc., Tloga St. at Roosevelt Ave., York, Pa.  
General Floorcraft, Inc., 421 Hudson St., New York 14, N. Y.  
Kent Co., Inc., 359 Canal St., Rome, N. Y.  
Red Devil Tools, 130 Colt St., Irvington 11, N. J.

#### POSTS, Binding

Cambridge Thermionic Corp., 445 Concord Ave., Cambridge 38, Mass.  
Eastern Specialty Co., 3617 N. 8th St., Phila. 40, Pa.  
General Radio Co., 275 Massachusetts Ave., Cambridge 39, Mass.  
Gries Reproducer Corp., 123 Beechwood St., New Rochelle, N. Y.  
Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa.  
Penn-Union Electric Corp., 315 State St., Erie, Pa.  
Steel Co., Herman D., 225 Lafayette Bldg., Phila. 6, Pa.  
Superior Electric Co., 83 Laurel St., Bristol, Conn.

#### POSTS, Street Lamp

1. Concrete  
2. Metal  
3. Wood  
Adjusta Post Mfg. Co., 908 St. Clair St., Akron 7, Ohio (2)  
Alhambra Foundry Co., Ltd., 1147 Meridian Ave., Alhambra, Calif. (2)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2)  
Hadco Aluminum Products Co., 501 Presley St., Pittsburgh 12, Pa. (2)  
Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (1, 2)  
Koppers Co., Inc., Wood Preserving Div., Koppers Bldg., Pittsburgh 19, Pa. (3)  
Line Material Co., 700 West Michigan St., Milwaukee, Wis. (1, 2)  
Millerbernd Mfg. Co., Winsted, Minn. (2)  
Nepo Mfg. Co., 6025 N. Keystone Ave., Chicago 30, Ill. (2)  
Philadelphia Electrical & Mfg. Co., 1200-36 N. 31 St., Phila. 21, Pa. (1, 2)  
Revere Electric Mfg. Co., 6017 Broadway, Chicago 40, Ill. (2)  
Ryther Purdy Lumber Co., 501 Tiffany St., New York 59, N. Y. (3)  
Union Metal Mfg. Co., 1432 Maple Ave., Canton 5, Ohio (2)

#### POTENTIOMETERS, Indicating and Recording

Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland 10, Ohio  
Barber-Colman Co., P. O. Drawer 99, 1300 Rock St., Rockford, Ill.  
Burns Laboratories, Instrument Sales Corp., 6135 Magnolia Ave., Riverside, Calif.



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**C** No. 204-T Pole With No. 3018 Area Lighter and Gluster Floods

**D** No. 304-12 Low Mounting Pole for Explosive Areas

**E** No. 702 Series Tapered Octagonal Street Lighting Pole

Bristol Co., Waterbury 20, Conn.  
Despatch Oven Co., 619 S.E. 8th St., Minneapolis 14, Minn.  
Fielden Instrument Div., Robertshaw-Fulton Controls Co., 2920 N. Fourth St., Phila. 33, Pa.  
Gamewell Co., 1238 Chestnut St., Newton Upper Falls 64, Mass.  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
Gray Instrument Co., 64 W. Johnson St., Phila. 44, Pa.  
Librascope, Inc., 808 Western Ave., Glendale 1, Calif.  
Minneapolis-Honeywell Regulator Co., Industrial Div., Wayne & Windrim Aves., Phila. 44, Pa.  
Partlow Corp., 2 Campion Rd., New Hartford, N. Y.  
Pereny Equipment Co., 893 Chambers Rd., (Station A, Box 153), Columbus, Ohio  
Rattray & Co., Inc., George, 116-08 Myrtle Ave., Richmond Hills 18, N. Y.  
Sensitive Research Instrument Corp., 9 Elm Ave., Mount Vernon, N. Y.  
Tech Labs Inc., Bergen & Edsall Bldgs., Palisades Park, N. J.  
Technology Instrument Corp., 531 Main St., Acton, Mass.  
West Instrument Corp., 525 N. Noble St., Chicago 22, Ill.  
Weston Electrical Instrument Corp., 614 Frellinghuysen Ave., Newark 5, N. J.

#### POTENTIOMETERS, Pyrometer—see PYROMETERS

#### POTENTIOMETERS, Slide Contact—see RHEOSTATS, Laboratory

#### POTHEADS

Adalet Mfg. Co., 14300 Lorain Ave., Cleveland 11, Ohio  
Brach Mfg. Corp., 200 Central Ave., Newark, N. J.  
Electrical Engineers Equipment Co., 25th Ave. & Division St., Melrose Park, Ill.  
G & W Electric Specialty Co., 7780 Dante Ave., Chicago 19, Ill.  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
Joy Mfg. Co., Electrical Connector Div., 1201 Macklind Ave., St. Louis 10, Mo.  
Rusgreen Mfg. Co., 14262 Birwood Ave., Detroit 38, Mich.

#### POTS

1. Glue  
2. Melting  
Acme Electric Heating Co., 1217 Washington St., Boston 18, Mass. (1, 2)

American Pipe Tool Co., 4856 W. Kirzie St., Chicago 44, Ill. (2)  
Barnard Co., Inc., B. S., 128 Lafayette St., N. Y. 13, N. Y. (2)  
Black & Decker Mfg. Co., Towson 4, Md. (1)  
Cooper Co., D. C., 1467 S. Michigan Ave., Chicago 5, Ill. (1, 2)  
Dee Electric Co., 1101 No. Paulina St., Chicago 22, Ill. (2)  
Electric Soldering Iron Co., Inc., West Elm St., Deep River, Conn. (2)  
Falcon Equipment Co., 13th St., New Brighton, Pa. (2)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2)  
Salem Tool Co., 767 S. Ellsworth Ave., Salem, Ohio (2)  
Sweet Iron Works, A. L., 166 Glenwood Ave., Medina, N. Y. (2)  
Turner Brass Works, 821 Park Ave., Sycamore, Ill. (2)  
Vulcan Electric Co., 88 Holten St., Danvers, Mass. (1, 2)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2)  
• WIEGAND CO., EDWIN L., 7637 Thomas Blvd., Pittsburgh 8, Pa. (2)—ADV. PG. 148

#### POTS, Misc.

Fire—see TORCHES, Blow  
Pouring—see POTS, Melting; KETTLES, Compound  
Solder—see POTS, Melting

#### POUCHES, Tool

Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa.  
Dorsey Co., John E., 80 K St., Boston 27, Mass.  
General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill.  
Kline, Savidge Co., Inc., 163 N. Third St., Phila. 6, Pa.  
Marbelite Co., Inc., 27 Warren St., New York 7, New York  
Stevens Walden Inc., 400 Shrewsbury St., Worcester, Mass.  
Utilities Safety Supply Co. Inc., 3112 Indiana Ave., Kansas City 3, Mo.

#### POWDER, Molding—see COMPOUNDS, Molding

#### POWER PLANTS—see PLANTS

#### PRESERVATIVES—see COMPOUNDS

#### PRESSES, Lead Sealing—see SEALS, METER



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**Cable Pull-In**—see **GUIDES, Cable Pull-In Cathodic**—see **RECTIFIERS, Cathodic Protection**

**Cord**—see **PLUGS, Appliance Connector Galvanic Corrosion**—see **RECTIFIERS, Cathodic Protection**

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**PRUNERS, Tree**—see **TOOLS, Pruning; TRIMMERS**

### PULLERS

1. Cable
2. Fuse
3. Gear
4. Pulley
5. Slack
6. Wheel

Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa. (1)

Armstrong-Bry & Co., 5366 Northwest Highway, Chicago 30, Ill. (3, 4, 6)

Barth Corp., 12650 Brookpark Rd., Cleveland 30, Ohio (1)

Blackhawk Mfg. Co., 5325 W. Rogers, Milwaukee 46, Wis. (4, 6)

C & G Wheel Puller Co., Inc., Scio, N. Y. (3, 4, 6)

Cable Spinning Equipment Co., 3100 Topeka Ave., Topeka, Kan. (5)

Coffing Holst Co., 800 Walter St., Danville, Ill. (1)

Commercial Enclosed Fuse Co. of N. J., 6812 Polk St., Guttenberg, N. J. (2)

• **COPE, INC., T. J., 711 S. 50 St., Phila. 43, Pa. (1)**—ADV. PG. 112-113

Crescent Tool Co., 200 Harrison St., Jamestown, N. Y. (1)

Duro Metal Products Co., Kildare & Schubert Sts., Chicago, Ill. (3)

Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (2)

Economy Fuse & Mfg. Co., 2717 N. Greenview Ave., Chicago 14, Ill. (2)

Gem Electric Mfg. Co., Inc., 237 37th St., Brooklyn, N. Y.

General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill. (2)

General Electric Co., Trumbull Components Dept., 41 Woodford Ave., Plainville, Conn. (2)

• **GREENLEE TOOL CO., 2136 Twelfth St., Rockford, Ill. (1)**—ADV. PG. 102-103

Holub Industries, Inc., 442 Elm St., Sycamore, Ill. (2)

Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill. (2)

Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo. (4, 6)

Kellams Co., 15 Williams St., Stonington, Conn. (1)

Klein & Sons, Mathias, 7200 McCormick Rd., Chicago 14, Ill. (1, 5)

Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio (2, 3, 6)

Owatonna Tool Co., Owatonna, Minn. (3, 4, 6)

P & C Hand Forged Tool Co., Box 5926, Milwaukee 5, P. O. Portland 22, Ore. (3, 4, 6)

Preformed Line Products Co., 5349 St. Clair Ave., Cleveland 3, Ohio (1, 5)

Proto Tools, Box 3519 Terminal Annex, Los Angeles 54, Cal. (3, 6)

Reliable Electric Co., 3145 Carroll Ave., Chicago 12, Ill. (1)

Robot Appliances, Inc., 7041 Orchard St., Dearborn, Mich. (1)

Safety Live Line Tool Co., 973 86th Ave., Oakland 21, Calif. (2)

Snap-On Tools Corp., 8028-28th Ave., Kenosha, Wis. (3, 4, 6)

Superior Fuse & Mfg. Co., Inc., 221 Hudson St., Hoboken, N. J. (2)

Templeton, Kenly & Co., Gardner Rd., Broadview, Ill. (1, 3, 5, 6)

Trico Fuse Mfg. Co., 2948 No. 5th St., Milwaukee 12, Wis. (2)

Utilities Service Co., 1 Pine St., Allentown, Pa. (2)

Wing Mfg. Co., L. J., Linden, N. J. (2)

### PULLEYS

1. Line Wire Stringing
2. "V" Belt

Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (2)

American Pulley Co., 4200 Wissahickon Ave., Phila. 29, Pa. (2)

Browning Mfg. Co., Maysville, Ky. (2)

Congress Drives Div., Tann Corp., 3750 E. Outer Dr., Detroit 34, Mich. (2)

Cope, Inc., T. J., 711 S. 50 St., Phila. 43, Pa. (1)

Dayton Rubber Co., P. O. Box 1004, Dayton 1, Ohio (2)

Dick Co., Inc., R. & J., Passaic, N. J. (2)

Dicks Tool Co., 1201 Warren Ave., Downers Grove, Ill. (1, 2)

Dodge Mfg. Corp., 1944 S. William St., Mishawaka, Ind. (2)

Duro Metal Products Co., Kildare & Schubert Sts., Chicago, Ill. (2)

Equi-Dyne, Inc., 5729 W. Ohio St., Chicago 44, Ill. (2)

Equipment Engineering Co., 2853 Columbus Ave., Minneapolis 7, Minn. (2)

General Armature & Mfg. Co., P. O. Box 370, Lock Haven, Pa. (2)

Hodgkins Co., J. F., 140 Water St., Randolph, Gardiner, Maine (1)

Indus Corp., 1015 Madison Ave., Indianapolis 25, Ind. (2)

Klein & Sons, Mathias, 7200 McCormick Rd., Chicago 14, Ill. (1)

Lau Blower Co., 2001 Home Ave., Dayton 7, Ohio (2)

Lovejoy Flexible Coupling Co., 4963 W. Lake St., Chicago 44, Ill. (2)

Petersen Engineering Co., Mrs., 460 Kifer Rd., Santa Clara, Calif. (1)

Sherman & Reilly, Inc., 1 Broad St., Chattanooga 2, Tenn. (1)

Worthington Corp., Worthington Ave., Harrison, N. J. (2)

### PULLEYS, Misc.

**Fixture Lowering**—see **HANGERS, Fixture**

**Disconnecting**

**Magnetic**—see **SEPARATORS, Magnetic**

**Short Center Drive**—see **PULLEYS, r/v Belt**

**Variable Speed**—see **TRANSMISSIONS, Variable Speed**

See also **SHEAVES; BLOCKS**

### PUMPS

1. Centrifugal
2. Hydraulic, Electrically-Driven
3. Manhole Portable
4. Vacuum

Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis.

American Engineering Co., Aramingo Ave. & Cumberland St., Phila. 25, Pa. (2)

American Hydovac Div., Pitz Foundry Inc., 290 Scholes St., Brooklyn 6, N. Y. (1, 4)

Aurora Pump Div., New York Air Brake Co., 54 Loucks St., Aurora, Ill.

Bell & Gossett Co., 8200 N. Austin Ave., Morton Grove, Ill.

Blackhawk Mfg. Co., 5325 W. Rogers, Milwaukee 46, Wis. (2)

Central Scientific Co., 1700 Irving Pk. Rd., Chicago 13, Ill.

Chain Belt Co., 4701 W. Greenfield Ave., Milwaukee 1, Wis.

Chicago Pneumatic Tool Co., 6 E. 44 St., N. Y. 17, N. Y. (1, 3, 4)

Dayton Electric Mfg. Co., 126 S. Oakley Blvd., Chicago 12, Ill.

Dayton Pump & Mfg. Co., 500 N. Webster St., Dayton 1, Ohio (2)

Dean Hill Pump Co., Inc., 4000 E. 16th St., Indianapolis 7, Ind. (1)

Decatur Pump Co., 2750 Nelson Park Drive, Decatur, Ill. (1)

Deming Co., Salem, Ohio (1)

Dempster Mill Mfg. Co., 711 S. Sixth St., Beatrice, Neb. (1, 2)

Dunham Co., C. A., 400 W. Madison St., Chicago 6, Ill. (1, 4)

Eitel-McCullough, Inc., 798 San Mateo Ave., San Bruno, Calif.

Fairbanks, Morse & Co., 600 S. Michigan Ave., Chicago 5, Ill.

Flint & Walling Mfg. Co., Inc., 95 Oak St., Kendallville, Ind. (1)

Flood City Brass & Electric Co., Messenger & Elder Sts., Johnston, Pa.

Gelber Co., Samuel S., 162 N. Clinton St., Chicago 6, Ill. (1, 3, 4)

Goulds Pumps, Inc., 200 Fall St., Seneca Falls, N. Y. (1, 2, 3)

• **GREENLEE TOOL CO., 2136 Twelfth St., Rockford, Ill. (2)**—ADV. PG. 102-103

Homelite Corp., 67 Riverdale Ave., Port Chester, N. Y.

Hypro Engineering, Inc., 700 39th Ave., N. E., Minneapolis 21, Minn.

Ingersoll-Rand Co., 11 Broadway, N. Y. 4, N. Y. (1, 4)

Mall Tool Co., 7740 S. Chicago Ave., Chicago 19, Ill.

Manco Mfg. Co., Bradley, Ill. (2)

Midco Mfg. & Distrib. Co., Inc., 1129 S. 13 St., Sheboygan, Wis.

Pioneer Pump Div., Detroit Harvester Co., 14300 Tireman Ave., Detroit 28, Mich.

Piqua Machine & Mfg. Co., 441 S. College St., Piqua, Ohio

Quick Charge, Inc., 1750 N. E. 10th St., Oklahoma City 4, Okla. (1, 2)

Robbins & Myers, Inc., 1345 Lagonda Ave., Springfield, Ohio

Standard Electric Mfg. Co., Inc., Haddon Ave., West Berlin, N. J. (1)

Stokes Machine Co., F. J., 5500 Tabor Rd. (Olney P. O.), Phila. 20, Pa. (4)

Swett Iron Works, A. L., 166 Glenwood Ave., Medina, N. Y. (1)

Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J.

Worthington Corp., Worthington Ave., Harrison, N. J. (1, 2, 4)

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Air—see **GENERATORS, Ozon**  
Oil—see **FILTERS**  
Water—see **STERILIZERS**

**PUSHERS**

1. Fish Tape
2. Pipe

Burbank Electrical Products, 215 W. Palm Ave.,  
P. O. Box 7, Burbank, Calif. (1)  
Cope, Inc., T. J., 711 S. 50 St., Phila. 43, Pa.  
(1)

● **GREENLEE TOOL CO.**, 2136 Twelfth St., Rock-  
ford, Ill. (2)—ADV. PG. 102-103  
Robot Appliances, Inc., 7041 Orchard St., Dearborn,  
Mich. (1, 2)

**PUSHERS, Pipe**—see also **JACKS, Pipe Pushing**

**PYROMETERS**

Assembly Products, Inc., Chesterland 31, Ohio  
Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland 10,  
Ohio  
Barber-Colman Co., P. O. Drawer 99, 1300 Rock  
St., Rockford, Ill.  
Bristol Co., Waterbury 20, Conn.  
Electronics Corp. of America, 77 Broadway, Cam-  
bridge 42, Mass.  
General Electric Co., Apparatus Sales Div., 1 River  
Road, Schenectady 5, N. Y.  
Gray Instrument Co., 64 W. Johnson St., Phila. 44,  
Pa.  
Illinois Testing Laboratories, Inc., 420 N. LaSalle  
St., Chicago 10, Ill.  
J-B-T Instruments, Inc., 441 Chapel St., New  
Haven 8, Conn.  
Meters, Inc., 5353 N. Keystone Ave., Indianapolis  
20, Ind.  
Minneapolis-Honeywell Regulator Co., Industrial Div.,  
Wayne & Windrim Aves., Phila. 44, Pa.  
Partlow Corp., 2 Campion Rd., New Hartford, N. Y.  
Pereny Equipment Co., 893 Chambers Rd. (Station  
A, Box 153), Columbus, Ohio  
Minneapolis-Honeywell Regulator Co., 2753 Fourth  
Ave. S., Minneapolis 8, Minn.  
Richards Co., Inc., Arklay St., 9 Winchester St.,  
Newton Highlands 61, Mass.  
Sensitive Research Instrument Corp., 9 Elm Ave.,  
Mount Vernon, N. Y.  
Thermo Electric Mfg. Co., 465 Huff St., Dubuque,  
Iowa  
West Instrument Corp., 525 N. Noble St., Chicago  
22, Ill.  
Weston Electrical Instrument Corp., 614 Frelinghuy-  
sen Ave., Newark 5, N. J.

**R**

**RACEWAY, Metal**

1. Cellular Floor
2. Surface
3. Underfloor
4. Underplaster Extension

American Steel & Iron Works, 5801 S. Lowe Ave.,  
Chicago 21, Ill. (2, 3, 4)  
Associated Lighting Service, 876 Kaynne St., Red-  
wood City, Calif. (2)  
Burns Co., James F., 705-715 Cherry St., Phila. 6,  
Pa. (2)  
General Electric Co., Construction Materials Div.,  
1285 Boston Ave., Bridgeport 2, Conn. (3)  
Globe Co., 4000 S. Princeton Ave., Chicago 9, Ill.  
Keystone Mfg. Co., 23328 Sherwood Rd., Center-  
line, Detroit, Mich. (2)  
Lew Electric Fittings Co., 627 W. Lake St., Chi-  
cago 6, Ill. (2, 4)  
Meco Metal Box & Panel Mfg. Co., Inc., 2522 W.  
Huntingdon St., Phila. 32, Pa. (2)  
Meter Devices Co., 1001 Prospect Ave. S.W., Canton  
6, Ohio (2)  
National Electric Products Corp., Gateway Center,  
140 Stanwix St., Pittsburgh 22, Pa. (1, 2, 3)  
Nelson Electric Mfg. Co., 217 N. Detroit Ave.,  
Tulsa 3, Okla. (2)  
Queen Products Co., Inc., Thirteenth & Rowan Sts.,  
Louisville 3, Ky. (2)  
Robertson Co. H. H., 2400 Farmers Bank Bldg.,  
Pittsburgh 22, Pa. (1, 3)  
Spang-Chalfant Div., National Supply Co., Two  
Gateway Center (P. O. Box 416), Pittsburgh 30,  
Pa. (2, 3, 4)  
Square D Co., 6060 Rivard St., Detroit 11, Mich.  
(2)  
● **STEEL CITY ELECTRIC CO.**, 1207 Columbus Ave.,  
Pittsburgh 33, Pa. (2)—ADV. PG. 124  
Unistrut Products Co., 1013 W. Washington Blvd.,  
Chicago 7, Ill. (1, 2, 3)  
Walker Brothers, End St., Conshohocken, Pa. (3)  
Wiremold Co., Hartford 10, Conn. (2)

**RACEWAY, Non-Metallic, Surface**

Spaulding Fibre Co., Inc., 310 Wheeler St., Tona-  
wanda, N. Y.

**RACEWAY, Misc.**

Showcase Lighting—see **REFLECTORS, Show-  
case**  
See also—**WIREWAYS**  
Stamford Casting Co., Inc., 796 Atlantic St., Stam-  
ford, Conn. (3)

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3. Ladder

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Chicago 21, Ill. (1, 2, 3)  
Barnard Co., Inc., B. S., 128 Lafayette St., New  
York 13, N. Y. (1, 2)  
Burns Co., James F., 705-715 Cherry St., Phila. 6,  
Pa. (1)  
Cope, Inc., T. J., 711 S. 50 St., Phila. 43, Pa.  
(1, 2, 3)  
Efficiency Electric & Mfg. Co., Park Ave. Ext.,  
P. O. Box 30, East Palestine, Ohio (2)  
Electric Service Mfg. Co., 17th & Cambria Sts.,  
Phila. 32, Pa. (1)  
Electric Mfg. Co., Box 217, Battle Creek, Mich.  
(2, 2)  
Fletcher Mfg. Co., 302 E. 2nd St., Dayton 2, Ohio  
(1, 2)  
General Electric Co., Construction Materials Div.,  
1285 Boston Ave., Bridgeport 2, Conn. (1)  
Globe Co., 4000 S. Princeton Ave., Chicago 9, Ill.  
Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa.  
(1, 2)  
Hughes Bros., Inc., Seward, Neb. (2)  
Husky Products, Inc., 5300 Vine St., Cincinnati 17,  
Ohio (1)  
Kirk & Blum Mfg. Co., 3120 Forrer St., Cin-  
cinnati 9, Ohio (1)  
Knox Porcelain Corp., 2706 Mynders Ave. (P. O.  
Box 2031), Knoxville 1, Tenn. (2)  
Kortick Mfg. Co., 5600 Third St., San Francisco  
24, Calif. (1, 2)  
Leibfried Mfg. Corp., C. H., 95-101 Guernsey St.,  
Brooklyn 22, N. Y. (1, 2, 3)  
Line Material Co., 700 W. Michigan St., Milwaukee,  
Wis. (1, 2)  
Link, Clyde W., 2323 W. 18 St., Chicago 8, Ill. (2)  
M. & W. Electric Mfg. Co., Inc., S. Walnut St.  
(P. O. Box 87), East Palestine, Ohio (1)  
Multi-A-Frame Div., Alinsworth Mfg. Corp., 1471-77  
E. Atwater St., Detroit 7, Mich. (1, 3)  
Murray Mfg. Corp., 1250 Atlantic Ave., Brooklyn  
16, N. Y. (1)  
Oliver Iron & Steel Corp., 1014 Oliver Building,  
Pittsburgh 22, Pa. (1, 2)  
Porcelain Products, Inc., P. O. Box 300, Findlay,  
Ohio (2)  
Queen Products Co., Inc., Thirteenth & Rowan Sts.,  
Louisville 3, Ky. (1)  
Rakit Corp., 711 S. 50th St., Phila. 43, Pa. (1)  
St. Louis Malleable Casting Co., 7701 N. Conduit  
Ave., St. Louis 15, Mo. (1, 2)  
Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23,  
Pa. (1, 2)  
● **STEEL CITY ELECTRIC CO.**, 1207 Columbus Ave.,  
Pittsburgh 33, Pa. (1)—ADV. PG. 124

Superior Porcelain Co., 934 1/2 Market St., Parkers-  
burg, W. Va. (2)  
Utilities Service Co., 1 Pine St., Allentown, Pa.  
(1, 2)  
Versabar Corp., 517 Communipaw Ave., Jersey City  
6, N. J. (1, 2, 3)

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**RAILS, Guard**—see **GUARDS, Manhole**

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3. Household, Electric
4. Household, Electric, Built-In

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N. Y. (3, 4)  
Barber-Colman Co., P. O. Drawer 99, 1300 Rock  
St., Rockford, Ill. (1)  
General Air Conditioning Corp., 4542 E. Dunham  
St., Los Angeles 23, Calif. (1, 3)  
General Electric Co., Major Appliance Div., Appliance  
Park, Louisville, Ky. (3, 4)  
Gibson Refrigerator Co., 515-615 W. Williams St.,  
Greenville, Mich. (3)  
Gray & Dudley Co., 2300 Clifton Rd., Nashville 3,  
Tenn. (3, 4)  
Hotpoint Co., 5600 W. Taylor St., Chicago 44, Ill.  
(2, 3, 4)  
Hotpoint Co., Commercial Equipment Dept., 227  
South Seely Ave., Chicago 12, Ill. (2)  
Lindemann & Hoverson Co., A. J., 601 W. Cleve-  
land Ave., Milwaukee 15, Wis. (3, 4)  
Malleable Iron Range Co., Beaver Dam, Wis. (1, 3)  
Perfection Industries, Inc., 7609 Platt Ave., Cleve-  
land 4, Ohio (3)  
Philo Corp., Tlogs & C Sts., Phila. 34, Pa. (3)  
Preway Inc., 1430 Second St. North, Wisconsin  
Rapid, Wis. (3, 4)  
Thor Corp., 2115 So. 54th Ave., Chicago 50,  
Ill. (3)  
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Berkshire Transformer Corp., 15 South Ave., New Milford, Conn.  
Chicago Transformer Corp., Addison & Elston, Chicago 18, Ill.  
Coll. Co. of America, Inc., 48 Perry St., Closter, N. J.  
Coll. Co. of America, Inc., 8 Washington St., Northvale, N. J.  
Electric Controller & Mfg. Co., 4493 Lee Rd., Cleveland 28, Ohio  
Goslin Electric & Mfg. Co., 2921 W. Olive St., Burbank, Calif.  
Jeffries Transformer Co., 1710 E. 57 St., Los Angeles 58, Calif.  
Magnavox Co., Fort Wayne 4, Ind.  
Murray Mfg. Corp., 1250 Atlantic Ave., Brooklyn 16, N. Y.  
Nothelfer Winding Labs., Inc., 120 Albermarle Ave., Trenton 3, N. J.  
Thordarson-Meissner Mfg. Div., Maguire Industries, Inc., Seventh & Belmont Sts., Mt. Carmel, Ill.  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.

**REACTORS, Misc.**

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Power—see REACTORS, Current Limiting  
Radio, Sound, etc.—see TRANSFORMERS (Classified as to Application), Radio, Sound, etc.

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American Pipe Tool Co., 4856 W. Kinzie St., Chicago 44, Ill.  
Beaver Pipe Tools, Inc., 310 Dana Ave. N. E., Warren, Ohio  
Nye Tool Co., 4120-30 Fullerton Ave., Chicago 32, Ill.  
Reed Mfg. Co., 1456 W. 8th St., Erie, Pa.  
Ridge Tool Co., 400 Clark St., Elyria, Ohio  
Toledo Pipe Threading Machine Co., 1445 Summit St., Toledo 4, Ohio  
Union Tool Co., 48 E. River St., Orange, Mass.  
Vaco Products Co., 317 E. Ontario St., Chicago 11, Ill.  
Whitman & Barnes Div., Unified Drill and Tool Corp., 40600 Plymouth Rd., Plymouth, Mich.

RECEIVERS, Intercommunicating Telephone—see SYSTEMS, Communicating; TELEPHONES

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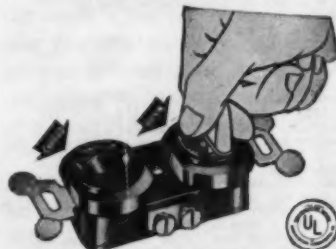
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4. Sign
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Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (4, 5)  
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Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (1, 2, 3, 4, 5)  
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Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (1, 5)  
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Kulka Electric Mfg. Co., Inc., 633 S. Fulton Ave., Mount Vernon, N. Y. (3, 4, 5)  
Leviton Mfg. Co., Inc., 236 Greenpoint Ave., Brooklyn 22, N. Y. (1, 2, 3, 4, 5)  
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Massey, Inc., A. H., 111 3rd St. (P. O. Box 206), Derby, Conn. (2)  
Midwest Electric Products, Inc., 1515 N. Front St., Mankato, Minn. (5)  
Multi Electric Mfg. Inc., 4223 W. Lake St., Chicago 24, Ill. (5)  
Oceanic Electric Products Corp., 187 Water St., New York 38, N. Y. (5)  
Pass & Seymour, Inc., Syracuse 9, N. Y. (1, 2, 3, 4, 5)  
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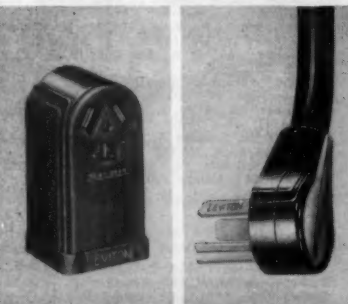
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 Brown Boveri Corp., 19 Rector St., N. Y. 6, N. Y. (6, 7)  
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 Eitel-McCullough, Inc., 798 San Mateo Ave., San Bruno, Calif. (7, 9)  
 Electrical Facilities, Inc., 4224 Holden St., Oakland 8, Calif. (2, 3, 8)  
 Electro Rust-Proofing Corp., 30 Main St., Belleville 9, N. J. (3)  
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Standard Electronic Corp., 285 Emmet St., Newark 5, N. J. (8, 9)  
Sylvania Electric Products, Inc., 1740 Broadway, New York 19, N. Y. (5)  
Syntron Co., 690 Lexington Ave., Homer City, Pa. (2, 8)  
Ther Electric & Machine Works, 17 S. Jefferson St., Chicago 6, Ill. (2, 3, 9)  
Varo Mfg. Co., Inc., 1801 Walnut St., Garland, Tex. (8, 9)  
Vickers Electric Div., Vickers, Inc., 1847 Locust St., St. Louis 3, Mo. (8)  
Weltronic Co., 19500 W. Eight Mile Rd., Detroit 19, Mich. (9)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1)

**REDUCERS**

1. Fuse
2. Speed

Abart Gear & Machine Co., 4830 W. 16 St., Chicago 50, Ill. (2)  
American Pulley Co., 4200 Wissahickon Ave., Phila. 29, Pa. (2)  
Bodine Electric Co., 2254 W. Ohio St., Chicago 12, Ill. (2)  
Bussmann Mfg. Co., 2536 W. University St., St. Louis 7, Mo. (1)  
Commercial Enclosed Fuse Co. of N. J., 6812 Polk St., Guttenberg, N. J. (1)  
Dodge Mfg. Corp., 1944 S. William St., Mishawaka, Ind. (2)  
Eagle Electric Mfg. Co., Inc., 23-30 Bridge Plaza South, Long Island City 1, N. Y. (1)  
Grant Gear Works, Inc., 154 W. Second St., South Boston 27, Mass. (2)  
Holub Industries, Inc., 442 Elm St., Sycamore, Ill. (1)  
Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill. (1)  
Janette Electric Mfg. Co., Lehigh at Main Sts., Morion Grove, Ill. (2)  
Koltan Electric Mfg. Co., 123 New Jersey Railroad Ave., Newark 5, N. J. (1)  
Lima Electric Motor Co., Findlay Road, Lima, Ohio (2)  
Lovely Flexible Coupling Co., 4963 W. Lake St., Chicago 44, Ill. (2)  
Link-Belt Co., 307 N. Michigan Ave., Chicago 1, Ill. (2)  
Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (1)  
Perkins Machine & Gear Co., Circuit Ave., West Springfield, Mass. (2)  
Quadrangle Mfg. Co., 32 S. Peoria St., Chicago 7, Ill. (1)  
Royal Electric Co., Inc., 95 Grand Ave., Pawtucket, R. I. (1)  
Sterling Electric Motors, Inc., 5401 Telegraph Rd., Los Angeles 22, Calif. (2)  
Superior Fuse & Mfg. Co., Inc., 221 Hudson St., Hoboken, N. J. (1)  
Trico Fuse Mfg. Co., 2948 No. 5th St., Milwaukee 12, Wis. (1)  
U. S. Electrical Motors, Inc., 200 E. Slauson Ave., Los Angeles 54, Calif. (2)  
Worthington Corp., Worthington Ave., Harrison, N. J. (1)

**REDUCERS, Misc.**

Knockout—see ADAPTERS, Conduit Bushing  
Motorized Gear—see MOTORS (Classified as to Design), Gear  
Socket—see ADAPTERS, Screw Socket

**REELS**

1. Cable
2. Extension Cord
3. Fish Tape
4. Wire

Applon Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. (1, 2)  
Barnard Co., B. S., 128 Lafayette St., New York 13, N. Y. (3, 4)  
Benjamin Reel Products, Inc., 10700 Broadway, Cleveland 25, Ohio (1, 2)  
Black Mfg. Co., M., 300-08 N. Third St., Phila. 6, Pa. (2)  
Blackhawk Industries 250 S. Main St., Dubuque, Iowa (3)  
Burbank Electrical Products, 215 W. Palm Ave., P. O. Box 7, Burbank, Calif. (3)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (2)  
Chance Co., A. B., 210 N. Allen St., Centralia, Mo. (4)  
Cordomatic Div., Vacuum Cleaner Corp. of America, 1724 W. Indiana Ave., Phila. 32, Pa. (2)  
Dicke Tool Co., 1201 Warren Ave., Downers Grove, Ill. (4)  
Ericson Mfg. Co., 5209 Euclid Ave., P. O. Box 1401, Cleveland 3, Ohio (2)  
Four Wheel Drive Auto Co., 105 E. 12 St., Clintonville, Wis. (4)  
Gleason Reel Corp., 740 N. Plankinton Ave., Milwaukee 3, Wis. (1)

**FISH TAPE REEL and PULLER**



IMPROVED MODEL with off-set seam . . . no sharp edges

A "3-in-1" tool, speeds wiring . . . saves tape . . . gives a good, safe grip

SIX SIZES—1/8 x .045", 1/8 x .060" and 1/4 x .060 tape; 30, 100 and 200 ft. long.

THOUSANDS IN USE  
**FISH TAPES (less Reel)**

Highest grade, oil-tempered, flat spring steel. EIGHT SIZES: 50 ft.—1/8 x .045" to 200 ft.—1/4 x .060"

**HOLUB INDUSTRIES, Inc.**  
440 Elm St. — Sycamore, Ill.

Highway Trailer Co., 405 E. Fulton St., Edgerton, Wis. (1)  
Holub Industries, Inc., 442 Elm St., Sycamore, Ill. (3)  
Hykon Mfg. Co., E. State St. (P. O. Box 923), Alliance, Ohio (1, 2, 4)  
Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill. (3)  
Industrial Electrical Works, 1509 Chicago St., Omaha 2, Neb. (1, 2)  
Industrial Products Co., 2695 N. Fourth St., Phila. 33, Pa. (2)  
Ironbound Box & Lumber Co., 42 Hoffman Place, Hillside, N. J. (1)  
McCabe-Powers Auto Body Co., 5900 N. Broadway, St. Louis 15, Mo. (4)  
Murray Co., Inc., D. A., 632 N. Mill St., Tipton, Ind. (2)  
Olympic Instrument Laboratories, P. O. Box 62, Cove, Wash. (3)  
Roll-A-Reel Co., 1100 Sycamore St., Cincinnati 2, Ohio (1, 4)  
Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (3)  
Whitaker Reel Mfg. Co., 3704 Jackson St., (P. O. Box 1318), Monroe, La. (4)  
Woodhead Co., Daniel, 15 N. Jefferson St., Chicago 6, Ill. (2)

**REELS, Misc.**

Air Hose—see REELS, Extension Cord  
Power—see WINCHES, Truck  
Spring—see REELS, Extension Cord  
Wire Measuring—see MEASURERS, Wire and Cable  
See also—ROLLERS, Cable

**REFLECTORS, Lighting (Classified as to Design)**

1. Aluminum
2. Glass
3. Metal
4. Metal, Enameled
5. Mirrored
6. Plastic

Abolite Lighting Div., Jones Metal Products Co., West Lafayette, Ohio (1, 3, 4)  
Amigo Corp., 2037 W. Division St., Chicago 22, Ill. (1)  
Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. (1, 3, 4)  
Art Metal Co., 1814 E. 40 St., Cleveland 3, Ohio (1, 3)  
Associated Lighting Service, 876 Kayme St., Redwood City, Calif. (1, 3, 4)  
B. M. D. & R. Inc., 7020 Walker St., St. Louis Park, Minneapolis 16, Minn. (1, 3)



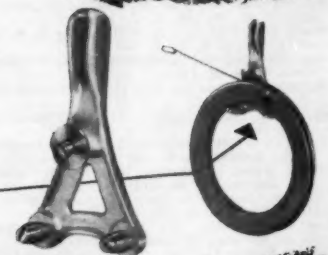


Patented, No. 1,890,945

### Speeds Wiring and Protects Tape

Three tools in one. Makes long conduit runs easy to handle and saves up to 50% in fishing time. Reel made of pressed sheet steel protects the hands and gives big grip that makes tape easy to reel in or out. SAFER because tape is always in Reel or conduit — can't spring loose. Tape is flat-type, tempered steel wire. Five lengths, 50 to 200 ft.

## TAKE THE FIGHT OUT OF FISH TAPE



## NEW IDEAL FISH TAPE WINDER

- Simpler • Safer
- Easier

- Makes IDEAL Fish Tape Reel Even more Useful

Reduces still further the work of fish tape pulling when used with an IDEAL Fish Tape Reel. As Winder is pulled around Reel it spreads the Reel housing so that the tape can be reeled in or out with least effort. Double rollers hold Winder in place as handle is rotated. Three sizes for all IDEAL Reels.

## COMPLETE FISH TAPE LINE

Flat fish tape without reel; round and nylon covered tape, with or without reel; Coil-Flex (spring type) tape; fish tape leaders and fish tape balls. Also spring-type Wire Guides that let conductors slide into conduit more easily and lever-type Fish Tape Pullers.

**IDEAL** IDEAL INDUSTRIES, Inc.  
5136 Park Ave. • Sycamore, Illinois

Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (1, 3, 4, 5)  
Century Lighting Inc., 521 W. 43 St., New York 36, N. Y. (1, 3)  
Cole & Co., Inc., C. W. 320 E. 12 St., Los Angeles 15, Calif. (1, 3, 4)  
Colonial Electric Products, Inc., 1-115 Market St., East Paterson, N. J. (1, 3, 4)  
Columbia Electric & Mfg. Co., North 2310 Fancher Way, Spokane, Wash. (1, 4)  
Commercial Reflector & Mfg. Co., 3109 Maple Ave., Los Angeles 11, Calif. (3, 4, 6)  
Comco Corp., 2251 W. St. Paul Ave., Chicago 47, Ill. (1, 3, 4)  
Condi-Lite Corp., 889 Broadway, New York 3, N. Y. (1, 3)

• **CROUSE-HINDS CO.**, Syracuse 1, N. Y. (1, 3, 4, 5)—ADV. PG. 116-117  
Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City, 1, N. Y. (3)  
Electro Silv-A-King Corp., 1535 South Paulina St., Chicago 8, Ill. (1, 3)  
Fullerton Mfg. Corp., Willard Rd., Norwalk, Conn. (1, 2, 3, 4, 5, 6)  
Garden City Plating & Mfg. Co., 1750 N. Ashland Ave., Chicago 22, Ill. (1, 4)  
General Lamps Mfg. Corp., Elwood, Ind. (3, 4)  
H. & H. Fixture Co., 1313 Walton Ave., St. Louis 13, Mo. (4)  
Holoshone Co., Inc., 342 Madison Ave., New York 17, N. Y. (2)  
House-O-Lite Corp., 2430 S. Ashland Ave., Chicago 7, Ill. (6)  
Jackson Electrical Co., 900 W. Van Buren St., Chicago 7, Ill. (1, 3, 4)  
Kent Metal Mfg. Co., Inc., 490 Johnson Ave., Brooklyn 37, N. Y. (1, 2, 3, 4, 5, 6)  
Keystone Electric Mfg. Co., 2228 E. Tioga St., Phila. 34, Pa. (3, 4)  
Killark Electric Mfg. Co., 3940 Easton Ave., St. Louis 13, Mo. (1)  
Kirlin Co., 3435 E. Jefferson Ave., Detroit 7, Mich. (1, 4)  
Kliegl Bros., Universal Electric Stage Lighting Co., Inc., 321 W. 50 St., N. Y. 19, N. Y. (1)  
Lancaster Lens Co., Lancaster, Ohio (2, 5)  
Lee-Bert, Inc., 900 Lapeer St., Saginaw, Mich. (6)  
Major Equipment Co., Inc., 4603 W. Fullerton Ave., Chicago 39, Ill. (1, 3)  
Mastercraft Plastics Co., Inc., 95-01 150th St., Jamaica 35, N. Y. (6)  
McKee Div., Thatcher Glass Mfg. Co., Inc., Grand Central Ave., Elmira, N. Y. (2)  
Midwest Lighting Products Co., P. O. Box 536, Edgewater Branch, Cleveland 7, Ohio (2, 5)  
Miller Co., 99 Center St., Meriden, Conn. (1, 3, 4)  
Miroflex Corp., Inc., 148 19th St., Brooklyn 32, N. Y. (1, 3, 4, 5)  
Molded Insulation Co., 335 E. Price St., Phila. 44, Pa. (6)

• **MULTI ELECTRIC MFG. INC.**, 4223 W. Lake St., Chicago 24, Ill. (1, 2, 3, 4)—ADV. PG. 134  
Neo-Ray Products Inc., 315 E. 22 St., N. Y. 10, N. Y. (1)  
Northern Light Co., 1661 N. Water St., Milwaukee 2, Wis. (5)  
Oceanic Electric Products Corp., 187 Water St., New York 38, N. Y. (4)  
Overbagh & Ayres Mfg. Co., 411 S. Clinton St., Chicago 7, Ill. (3, 4)  
Revere Electric Mfg. Co., 6017 Broadway, Chicago 40, Ill. (1)  
Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)  
Simplex Electric Co., 5136 Park Ave., Sycamore, Ill. (4)  
Smith-Victor Corp., Griffith, Ind. (1)  
Smoot-Holman Co., 321 N. Eucalyptus Ave. (P. O. Box 398), Inglewood, Calif. (3, 4)  
Solar Light Mfg. Co., 1357 S. Jefferson St., Chicago 7, Ill. (1, 3, 4, 6)  
Spero Electric Corp., 20500 St. Clair Ave., Cleveland 17, Ohio (4)  
Steber Mfg. Co., 2700 Roosevelt Rd., Broadview, Ill. (1, 3, 4)  
Stonco Electric Products Co., 333 Monroe Ave., Kenilworth, N. J. (4)  
Swedish Iron & Steel Corp., 100 Quimby St., Westfield, N. J. (4)  
Tri-Part Mfg. Co., 934 Plum St., Detroit 1, Mich. (3, 4)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (4)  
Westinghouse Electric Corp., Lighting Div., 1216 W. 58th St. (P. O. Drawer 5817), Cleveland 1, Ohio (1, 3, 4)  
Wheeler Reflector Co., 275 Congress St., Boston 10, Mass. (1, 3, 4)  
White Co., O. C., 15-21 Hermon St., Worcester 8, Mass. (3, 4)  
Williams Products Co., H. E., 106 S. Main St., Carthage, Mo. (3, 4)  
Woodward Machine Co., Lighting Div., 4833 Elm-hurst, Detroit 4, Mich. (1, 3, 4)

### REFLECTORS, Lighting (Classified as to Usage)

1. Bulletin Board
2. Core
3. Picture
4. Showcase
5. Show Window
6. Trough
7. Searchlight

Abolite Lighting Div., Jones Metal Products Co., West Lafayette, Ohio (1)  
Aikco Mfg. Co., 4242 N. Lincoln Ave., Chicago 18, Ill. (1)

Associated Lighting Service, 876 Kaynne St., Redwood City, Calif. (3, 5)  
B M D & R Inc., 7023 Walker St., St. Louis Park, Minneapolis 16, Minn. (1)  
Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (1, 2, 3, 4, 5, 6)  
Capitol Hardware Mfg. Co., Inc., 400 N. Leavitt St., Chicago, Ill. (4)  
Century Lighting Inc., 521 W. 43 St., New York 36, N. Y. (3, 5)  
Cole & Co., Inc., C. W. 320 E. 12 St., Los Angeles, Calif. (1, 2, 3, 4, 5, 6)  
Colonial Electric Products, Inc., 1-115 Market St., East Paterson, N. J. (1, 3, 4, 6)  
Columbia Electric & Mfg. Co., North 2310 Fancher Way, Spokane, Wash. (1, 2)  
Commercial Reflector & Mfg. Co., 3109 Maple Ave., Los Angeles 11, Calif. (1, 2, 3, 4, 5, 6)  
Comco Corp., 2251 W. St. Paul Ave., Chicago 47, Ill. (1, 2, 6, 7)  
Condi-Lite Corp., 889 Broadway, New York 3, N. Y. (1, 2, 3, 6)  
• **CROUSE-HINDS CO.**, Syracuse 1, N. Y. (1)—ADV. PG. 116-117  
Electro Silv-A-King Corp., 1535 S. Paulina St., Chicago 8, Ill. (1, 7)  
Fullerton Mfg. Corp., Willard Rd., Norwalk, Conn. (1, 2, 6)  
Garden City Plating & Mfg. Co., 1750 N. Ashland Ave., Chicago 22, Ill. (2, 4, 5)  
General Lamps Mfg. Corp., Elwood, Ind. (1, 3, 4)  
Gruber Bros., Inc., 125 S. 1 St., Brooklyn 11, N. Y. (1, 2, 5)  
H. & H. Fixture Co., 1313 Walton Ave., St. Louis 13, Mo. (5)  
Jackson Electrical Co., 900 W. Buren St., Chicago 7, Ill. (1)  
Ken Metal Mfg. Co., Inc., 490 Johnson Ave., Brooklyn 37, N. Y. (1, 2, 3, 4, 5, 6)  
Keystone Electric Mfg. Co., 2228 E. Tioga St., Phila. 34, Pa. (6)  
Kliegl Bros. Universal Electric Stage Lighting Co., Inc., 321 W. 50 St., N. Y. 19, N. Y. (2, 3, 5, 6)  
Lancaster Lens Co., Lancaster, Ohio (7)  
Litecontrol Corp., 36 Pleasant St., Watertown 72, Massachusetts (2, 6)  
Louverall Lighting Corp., 1770 W. Berteau Ave., Chicago 13, Ill. (2)  
Major Equipment Co., Inc., 4603 W. Fullerton Ave., Chicago 39, Ill. (2)  
Miroflex Corp., Inc., 148 19th St., Brooklyn 32, N. Y. (1, 2, 4, 5, 6, 7)  
Neo-Ray Products Inc., 315 E. 22 St., N. Y. 10, N. Y. (1, 5)  
Northern Light Co., 1661 N. Water St., Milwaukee 2, Wis. (3)  
Revere Electric Mfg. Co., 6017 Broadway, Chicago 40, Ill. (5, 7)  
Smoot-Holman Co., 321 N. Eucalyptus Ave. (P. O. Box 398), Inglewood, Calif. (1)  
Solar Light Mfg. Co., 1357 S. Jefferson St., Chicago 7, Ill. (1, 2)  
Stonco Electric Products Co., 333 Monroe Ave., Kenilworth, N. J. (7)  
Tri-Part Mfg. Co., 934 Plum St., Detroit 1, Mich. (1, 2, 3, 6)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (6)  
Westinghouse Electric Corp., Lighting Div., 1216 W. 58th St. (P. O. Drawer 5817), Cleveland 1, Ohio (7)  
Wheeler Reflector Co., 275 Congress St., Boston 10, Mass. (1)  
White Co., O. C., 15-21 Hermon St., Worcester 8, Mass. (1, 3)  
Williams Products Co., H. E., 106 S. Main St., Carthage, Mo. (4, 5)

### REFLECTORS, Lighting—see also FIXTURES, Lighting

### REFRACTORIES, Molded—see CORES, Refractory

### REFRACTORS, Prismatic Glass Shade—see REFLECTORS, Lighting (Classified as to Design), Glass

### REFRIGERATORS

#### 1. Commercial

#### 2. Household

Acme National Refrigeration Co., Inc., 29-24 40th Ave., Long Island City 1, N. Y. (2)  
Active Specialty Corp., 302 N. Water St., Newburgh, N. Y. (2)  
Bailey & Perkins Co., 4446 Van Dyke Ave. (P. O. Box 117), Utica, Mich. (1)  
Brunner Mfg. Co., 1821 Broad St., Utica, N. Y. (1)  
Deepfreeze Appliance Div., Motor Products Corp., 2301 Davis St., North Chicago, Ill. (2)  
Esco Cabinet Co., East Biddle St., West Chester, Pa. (1)  
Fogel Refrigerator Co., 5400 Endam St., Phila. 37, Pa. (1)  
Frigidaire Div., General Motors Corp., 300 Taylor St., Dayton 1, Ohio (1, 2)  
General Air Conditioning Corp., 4542 E. Dunham St., Los Angeles 23, Calif. (2)  
General Electric Co., Major Appliance Div., Appliance Park, Louisville, Ky. (2)  
Gibson Refrigerator Co., 515-615 W. Williams St., Greenville, Mich. (2)  
Hotpoint Co., 5600 W. Taylor St., Chicago 44, Ill. (2)

## PRODUCT DIRECTORY

Howard Refrigerator Co., 4745 Worth St., Phila. 24, Pa. (1, 2)  
 International Harvester Co., 180 N. Michigan Ave., Chicago 1, Ill. (2)  
 Jordan Refrigerator Co., Inc., 7900 Tabor Rd., Phila. 11, Pa. (1)  
 King Refrigerator Corp., 76-02 Woodhaven Blvd., Glendale 27, N. Y. (2)  
 Koch Refrigerators, Inc., 401 Funston Rd., Kansas City 13, Kans. (1)  
 Manitowoc Co., Inc., Manitowoc Equipment Works Div., 621 Quay St., Manitowoc, Wis. (2)  
 Philco Corp., Ties & C Sts., Phila. 34, Pa. (2)  
 Quicfrez, Inc., P. O. Box 471, Fond du Lac, Wis. (2)  
 Thor Corp., 2115 So. 54th Ave., Chicago 50, Ill. (2)  
 Victor Products Corp., 901 Pope Ave., Hagerstown, Md. (1)  
 Victory Metal Mfg. Corp., 200 W. Germantown Pike, Plymouth Meeting, Pa. (1)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (2)  
 Westinghouse Electric Corp., Electric Appliance Div., 246 E. Fourth St., Mansfield, Ohio (2)  
 York Corp., Roosevelt & P. R. R., York, Pa. (1)

## REGULATORS

1. Frequency
2. Heating System
3. Speed
4. Temperature, Furnace and Oven
5. Voltage

Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee 4, Wis. (3, 5)  
 Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (1, 3, 5)  
 American Electronics, Inc., 4811 Telegraph Rd., Los Angeles 22, Calif. (1)  
 Arga Div., Beckman Instruments, Inc., 220 Pasadena Ave., South Pasadena, Calif. (1)  
 Automatic Devices Co., Inc., 714 Hillgrove Ave., Western Springs, Ill. (2)  
 Automatic Temperature Control Co., Inc., 5212 Pulaski Ave., Phila. 44, Pa. (4)  
 Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland 10, Ohio (2, 3, 4)  
 Barber-Colman Co., P. O. Drawer 99, 1300 Rock St., Rockford, Ill. (4)  
 Beck Co., Harold, 3640 No. Second St., Philadelphia 40, Pa. (3, 4, 8, 9, 12)  
 Bell & Gossett Co., 8200 N. Austin Ave., Morton Grove, Ill. (2)  
 Bogue Electric Mfg. Co., 52 Iowa Ave., Paterson 3, N. J. (1, 3)  
 Bristol Co., Waterbury 20, Conn. (3, 4, 5)  
 Burling Instrument Co., Inc., 16 River Rd., Chatham, N. J. (4)  
 Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (3, 4, 5)  
 Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (3)  
 Electric Hotpack Co., Inc., Cottman Ave. at Melrose St., Phila. 35, Pa. (4)  
 Electric Regulator Corp., Norwalk, Conn. (1, 3, 5)  
 Ess Instrument Co., 96 S. Washington Ave., Bergenfield, N. J. (4)  
 Fielden Instrument Div., Robertshaw-Fulton Controls Co., 2920 N. Fourth St., Phila. 33, Pa. (3, 4)  
 Fischer & Porter Co., 335 Westminster Rd., Hatboro, Pa. (4)  
 Fulton Sylphon Div., Robertshaw-Fulton Controls Co., Box 400, Knoxville, Tenn. (2)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 3, 4, 5)  
 General Radio Co., 275 Massachusetts Ave., Cambridge 39, Mass. (3, 4, 5)  
 H-B Instrument Co., American & Bristol Sts., Philadelphia 40, Pa. (4)  
 Hewl Div. Electric Co., 4212 W. Highland Blvd., Milwaukee, Wis. (4)  
 Industrial Engineering & Equip. Co., Inc., 711 S. Theresa, St. Louis 5, Mo. (2, 4)  
 Iron Fireman Mfg. Co., Electronics Div., 2838 S. E. 9th Ave., Portland 2, Ore. (2, 4)  
 Kepco Laboratories, 131-30 Sanford Ave., Flushing 55, N. Y. (5)  
 Lee Electric, Inc., 132 Beckwith Ave., Paterson, N. J. (5)  
 Lovejoy Flexible Coupling Co., 4963 W. Lake St., Chicago 44, Ill. (3)  
 Magnetic Amplifiers, Inc., 632 Tinton Ave., N. Y. 55, N. Y. (1, 3, 5)  
 Mercold Corp., 4201 W. Belmont Ave., Chicago 41, Ill. (2, 4)  
 Moloney Electric Co., 5390 Birchard Blvd., St. Louis 20, Mo. (5)  
 Parlow Corp., 2 Campion Rd., New Hartford, N. Y. (4)  
 R T & E Co., 1900 E. North St., Waukegan, Wis. (5)  
 Raytheon Mfg. Co., Equipment Marketing Div., 100 River St., Waltham 54, Mass. (5)  
 Regulator Equipment Corp., 56 California Ave., Paterson 3, N. J. (1, 3, 5)  
 Simplex Co., 1139-41 N. MacArthur Blvd., Springfield, Ill. (5)  
 Sola Electric Co., 4633 W. 16 St., Chicago 50, Ill. (5)  
 Sorensen & Co., Inc., 375 Fairfield Ave., Stamford, Conn. (1, 5)  
 Superior Electric Co., 83 Laurel St., Bristol, Conn. (5)  
 Varo Mfg. Co., Inc., 1801 Walnut St., Garland, Tex. (1, 3)  
 Weltronic Co., 19500 W. Eight Mile Rd., Detroit 19, Mich. (1)

## Replace Troublesome or Obsolete Centrifugal Switches or Other Relays with the

Improved

## LEWUS RELAY

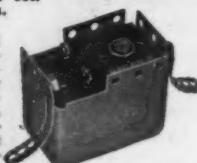
(Pat'd & Pat's. Pending)

An ideal replacement for motors frequently started in dirty and hazardous locations.



For Capacitor Start and Split-Phase Motors—1/2 to 5 HP. Available in 6 coil sizes, 25 to 60 cycles.

• Relay is provided with a variable magnetic phase shift within the relay coil for silent, sensitive snap action of contacts with negligible A.C. chatter. Operates constant under varying temperature conditions.



Mounted any position

Satisfaction Guaranteed

Write TODAY for descriptive bulletin

## LEWUS ELECTRIC CO.

1254 W. Harrison St., Chicago 7, Ill., U. S. A.  
 Immediate delivery from stock

Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 3, 5)  
 Wegand Co., Edwin L., 7637 Thomas Blvd., Pittsburgh 8, Pa. (5)

## REGULATORS, Misc.

Induction—see REGULATORS, Voltage  
 Line—see TRANSFORMERS (Classified as to Design), Auto  
 Liquid Level—see CONTROLS, Liquid Level;  
 SWITCHES, Control Automatic, Float  
 Motor Speed—see CONTROLLERS, Motor,  
 Speed Regulating  
 Transformer—see TRANSFORMERS (Classified as to Design), Auto  
 See also—CONTROLLERS; CONTROLS

REINFORCING, Pole—see BANDS, Pole Stubbing

## RELAYS

1. Current Control
2. Directional, Polarity
3. Directional, Power
4. Electronic, Industrial
5. Electronic Tube Delay
6. Hermetically Sealed
7. Mercury Tube Contact
8. Motor Speed Control
9. Phase Rotation
10. Photo-Electric
11. Signal
12. Temperature
13. Temperature, Refrigerator

Advance Electric & Relay Co., 2435 N. Nacmi St., Burbank, Calif. (1, 2, 3, 4, 6)  
 Aero Instrument Co., 11423 Vanowen St., North Hollywood, Calif. 16, 111  
 Altrisco Mfg. Co., Inc., 435 Melwood St., Pittsburgh 13, Pa. (1)  
 Aitken-Reed Inc., 2802 Wollmer St., Manitowoc, Wis. (1, 4, 5)  
 Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee 4, Wis. (1, 12, 13)  
 Allied Control Co., Inc., 2 East End Ave., New York 21, N. Y. (1, 2, 3, 6, 11)  
 Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (1, 2, 3, 8, 9)  
 Almo Mfg. Co., 119 Sussex St., Newark 4, N. J. (7)  
 American Relay & Controls, Inc., 3621 Howard St., Skokie, Ill. (1, 4, 6, 8, 11)  
 Assembly Products, Inc., Chesterland 31, Ohio (1, 2, 6, 12)  
 Auth Electric Co., Inc., 34-20 43rd St., L. I. C. 1, N. Y. (11)  
 Autocall Co., Shelby, Ohio (7, 11)

Automatic Electric Mfg. Co., 10 State St., Mankato, Minn. (1, 4, 6, 11)  
 Automatic Switch Co., 391 Lakeside Ave., Orange, N. J. (1, 2, 3, 5, 8, 9)  
 Automatic Temperature Control Co., Inc., 5212 Pulaski Ave., Phila. 44, Pa. (4, 7)  
 Barber-Colman Co., P. O. Drawer 99, 1300 Rock St., Rockford, Ill. (2)  
 Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (11)  
 Bristol Co., Waterbury 20, Conn. (1)  
 Caltron Products Co., 1406 S. Hobart Blvd., Los Angeles 6, Calif. (1)  
 Clark & Co., C. P., 4719 W. Sunnyside Ave., Chicago 30, Ill. (4, 6, 7, 11)  
 Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (1, 5, 8)  
 Connecticut Telephone & Electric Corp., 70 Britania St., Meriden, Conn. (11)  
 Cooper Hewitt Electric Co., 720-732 Grand St., Hoboken, N. J. (1)  
 Couch Co., Inc., S. H., 3 Arlington St., North Quincy 71, Mass. (1, 6)  
 Cramer Co., Inc., R. W., Main St., Centerbrook, Conn. (6)  
 Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (1, 3, 4, 6, 8, 10, 11, 12, 13)  
 Dayton Electric Mfg. Co., 126 S. Oakley Blvd., Chicago 12, Ill. (8)  
 Ebert Electronics Corp., 212-26 Jamaica Ave., Queens Village 28, L. I., N. Y. (1, 4, 6, 7)  
 Electric Controller & Mfg. Co., 4493 Lee Rd., Cleveland 28, Ohio (1, 8)  
 Electric Regulator Corp., Norwalk, Conn. (1, 6, 8)  
 Electronic Control Corp., 1573 E. Forest Ave., Detroit 7, Mich. (10)  
 Electronics Corp. of America, 77 Broadway, Cambridge 42, Mass. (4, 10)  
 Ess Instrument Co., 96 S. Washington Ave., Bergenfield, N. J. (10)  
 General Controls Co., 801 Allen Ave., Glendale, Calif. (1, 4, 7, 12, 13)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13)  
 Graybar Electric Co., Inc., 420 Lexington Ave., N. Y. 17, N. Y. (4)  
 Guardian Electric Mfg. Co., 1621 W. Walnut St., Chicago 12, Ill. (1, 3, 4, 6)  
 H-B Instrument Co., American & Bristol Sts., Philadelphia 40, Pa. (4, 6, 7, 12)  
 Haledy Electronics Co., 57 William St., N. Y. 5, N. Y. (1, 4, 5, 6, 7, 10)  
 Hart Mfg. Co., 110 Bartholomew Ave., Hartford, Conn. (1, 4, 6, 11)  
 Hartman Electrical Mfg. Co., 175 N. Diamond St., Mansfield, Ohio (1, 2, 3, 6)  
 Hayden Co., A. W., 232 N. Elm St., Waterbury, Conn. (6)  
 Hughey & Phillips Inc., 3300 N. San Fernando Blvd., Burbank, Calif. (10)  
 Illinois Testing Laboratories Inc., 420 N. LaSalle St., Chicago 10, Ill. (12)  
 Industrial Instruments Inc., 89 Commerce Rd., Cedar Grove, N. J. (5)  
 Iron Fireman Mfg. Co., Electronics Div., 2838 S. E. 9th Ave., Portland 2, Ore. (1, 6)  
 Kurman Electric Co., Inc., 35-18 37th St., L. I. C. 1, N. Y. (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13)  
 Langevin Mfg. Corp., 37 W. 65 St., N. Y. 23, N. Y. (5)  
 Lewus Electric Co., 1245 W. Harrison St., Chicago 7, Ill. (1)  
 Line Electric Co., 131 Ogden St., Newark 4, N. J. (11)  
 Machinery Electrification, Inc., Northboro, Mass. (1, 4, 5, 8, 10)  
 Mercold Corp., 4201 W. Belmont Ave., Chicago 41, Ill. (7)  
 Micro Balancing Inc., Garden City Park, Long Island, N. Y. (7, 10)  
 North Electric Mfg. Co., 501 S. Market St., Gallon, Ohio (1, 2, 4, 6, 11)  
 Ohmite Mfg. Co., 3601 Howard St., Skokie, Ill. (1, 4, 6, 8, 11)  
 Parlow Corp., 2 Campion Rd., New Hartford, N. Y. (12)  
 Partrick & Wilkins Co., 51 N. Seventh St., Phila. 6, Pa. (1, 11)  
 Peschel Electronics, Inc., 13 Garden St., New Rochelle, N. Y. (4, 5, 11)  
 Phillips Control Corp., 59 W. Washington St., Joliet, Ill. (1, 3, 4, 5, 6, 10, 11, 12)  
 Photobell Co., 43 Vesey St., New York 7, N. Y. (4, 5, 10, 12)  
 Plating Processes Co., 109 Lyman St., Holyoke, Mass. (4, 5)  
 Pollack Corp., Joseph, 81-95 Freeport St., Boston 22, Mass. (1, 2, 6)  
 Post Machinery Co., Electronic Products Div., 140 Elliott St., Beverly, Mass. (4)  
 Potter & Brumfield, Princeton, Ind. (1, 3, 4, 6, 8, 10, 11)  
 Potter Instrument Co., Inc., 115 Cutter Mill Rd., Great Neck, L. I., N. Y. (5)  
 Price Electric Corp., East Church & Second Sts., Frederick, Md. (6)  
 Quick Charge, Inc., 1750 N. E. 10th St., Oklahoma City 4, Okla. (4)  
 R-B-M Div., Essex Wire Corp., 131 Godfrey St., Logansport, Ind. (4, 6, 11, 13)  
 Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa. (3)  
 SAFA Alarm Div., Fyr-Fyter Co., 243 W. Market St., Orrville, Ohio (11)  
 Safety Car Heating and Lighting Co., Inc., P. O. Box 904, New Haven 4, Conn. (1)

Scam Instrument Corp., 3909 Irving Park Rd., Chicago 18, Ill. (6, 11)  
Signal Engineering & Mfg. Co., Branchport Ave., Long Branch, N. J. (1, 2, 3, 4, 6, 11)  
Special Products Co., P. O. Box 188, Rockville 2, Md. (10)  
Spies Electric Works, 564 W. Van Buren St., Chicago 7, Ill. (11)  
Square D Co., 6060 Rihard St., Detroit 11, Mich. (1, 8)  
Struthers-Dunn, Inc., Pittman, N. J. (1, 3, 4, 5, 6, 7, 11, 12, 13)  
Techniflex Corp., 55 Jersey Ave., Port Jervis, N. Y. (11)  
Telectro Industries Corp., 35-16 37th St., Long Island City 1, N. Y. (4)  
Terrado Co., 1068 Raymond Ave., St. Paul 14, Minn. (6)  
Thompson, Inc., O., 44-18 Purvis St., Long Island City 1, N. Y. (9)  
Touch-Plate Mfg. Corp., 16530 Garfield, Paramount, Bluffton, Ohio (1)  
Triplett Electrical Instrument Co., 286 Harmon Rd., Ulanet Co., George, 413-15 Market St., Newark 5, N. J. (1, 12)  
Vemaline Products Co., P. O. Box 222, Hawthorne, N. J. (10)  
Ward Leonard Electric Co., 115 MacQuesten Parkway South, Mount Vernon, N. Y. (1, 3, 8, 9, 11)  
Westinghouse Electric Corp., P. O. Box 8-8, Pittsburgh 30, Pa. (1, 4, 6, 8, 10, 11, 12)  
●WESTINGHOUSE ELECTRIC SUPPLY CO., 4<sup>th</sup> Wall St., New York 5, N. Y. (1)—ADV. PG. SECOND COVER  
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark 5, N. J. (1, 4, 6, 10, 11)  
Worner Electronic Devices, Rankin, Ill. (4)

**RELAYS, Misc.**

Delay—see **TIMERS**, Stop  
Demand Load Limiting—see **CONTROLS**, Demand Limiting  
Overload—see **CUTOFFS**, Thermal  
Vacuum—see **SWITCHES**, Control, Automatic, Pressure-Operated

**RELEASES**, Door—see **OPERATORS**, Door and Gate

**RELIEFS**, Strain

Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill.  
Circle F. Mfg. Co., 720 Monmouth St., Trenton 4, N. J.  
Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y.  
Heyman Mfg. Co., Kenilworth 20, N. J.  
Lint, Clyde W., 2323 W. 18 St., Chicago 8, Ill.  
Miller Electric Co., 120 Main St., Pawtucket, R. I.  
Pyle-National Co., 1334 N. Kostner Ave., Chicago 51, Ill.  
Spaulding Fibre Co., Inc., 310 Wheeler St., Tona-wanda, N. Y.  
Thomas & Betts Co., Inc., 36 Butler St., Elizabeth, N. J.  
Varo Mfg. Co., Inc., 1801 Walnut St., Garland, Tex.  
Woodward Machine Co., Lighting Div., 4833 Elm-hurst, Detroit 4, Mich.

**REMAGNETIZERS**—see **CHARGERS**, Magnet

**REMOTE-CONTROLLED SWITCHES**—See **SYS-TEMS**, Lighting, Remote Control Switch-ing, Low Voltage

**REMOVERS**

Armature Wedge—see **TOOLS**, Armature Repair  
Bearing—see **EXTRACTORS**  
Static Charge—see **NEUTRALIZERS**

**RESISTANCE**, Standard—see **RESISTORS**, Unit

**RESISTORS**

1. DC Fluorescent  
2. Negative Temperature Coefficient  
3. Nonlinear  
4. Unit  
5. Unit, Standard  
Atlas Resistor Co., Main & Cohon Sts., Phila. 27, Pa. (1 through 5)  
Bourne Laboratories, Instrument Sales Corp., 6135 Magnolia Ave., Riverside, Calif. (3)  
Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (3, 4, 5)  
Continental Carbon Inc., 13900 Lorain Ave., Cleve-land 11, Ohio (4, 5)  
Dale Products, Inc., Columbus, Neb. (2, 4)  
Erie Resistor Corp., 644 W. 12 St., Erie, Pa. (4, 5)  
Everett, Inc., E. A., 33-15 56th St., Woodside 77, N. Y. (4)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (3, 4, 5)  
General Electric Co., Carbonyl Dept., 11177 E. 8 Mile Rd., Detroit 32, Mich. (2)  
General Electric Co., Electronics Div., Electronics Park, Syracuse, N. Y. (5)  
Globar Div., Carborundum Co., Niagara Falls, N. Y. (2, 3)  
Gray Instrument Co., 64 W. Johnson St., Phila. 44, Pa. (4, 5)  
Guyan Machinery Co., Inc., Box 150, Logan, W. Va. (4, 5)

I.T.E. Circuit Breaker Co., 19th & Hamilton Sts., Phila. 30, Pa. (3, 4, 5)  
Instrument Resistors Co., 1036 Commerce Ave., Union, N. J. (4)  
International Resistance Co., 401 N. Broad St., Phila. 8, Pa. (4)  
Keystone Carbon Co., Inc., 1935 State St., St. Marys, Pa. (2)  
Kirkland Co., H. R., 8 King St., Morristown, N. J. (4)  
Lectrohm Inc., 5560 Northwest Highway, Chicago 30, Ill. (1, 4)  
Lyon Rural Electric Co., 2075 Moore St., San Diego 12, Calif. (4)  
Milwaukee Resistor Co., 700 W. Virginia St., Mil-waukee 4, Wis. (4, 5)  
Mullenbach Div., Electric Machinery Mfg. Co., 2300 E. 27 St., Los Angeles 58, Calif. (5)  
Ohmite Mfg. Co., 3601 Howard St., Skokie, Ill. (3, 4)  
Post-Glover Electric Co., 221 W. Third St., Cincin-nati 2, Ohio (5)  
Rattray & Co., Inc., George, 116-08 Myrtle Ave., Richmond Hills 18, N. Y. (3)  
Rex Rheostat Co., 3 Foxhurst Rd., Baldwin, L. I., N. Y. (1, 3)  
Sensitive Research Instrument Corp., 9 Elm Ave., Mount Vernon, N. Y. (5)  
Shallcross Mfg. Co., 33 Lincoln Ave., Collingdale, Pa. (4, 5)  
Stackpole Carbon Co., Tannery St., St. Marys, Pa. (1)  
States Co., 19 New Park Ave., Hartford 6, Conn. (2)  
Ward Leonard Electric Co., 115 MacQuesten Park-way, South, Mount Vernon, N. Y. (1, 2)

**RESURFACERS**—see **GRINDERS**; **STONES**

**RHEOSTATS**

1. Battery Charging  
2. Laboratory  
3. Meter Testing

Allen-Bradley Co., 136 W. Greenfield Ave., Mil-waukee 4, Wis. (1, 2, 3)  
Biddle Co., James G., 1316 Arch St., Phila. 7, Pa. (2)  
Bourne Laboratories, Instrument Sales Corp., 6135 Magnolia Ave., Riverside, Calif. (3)  
Central Scientific Co., 1700 Irving Pk. Rd., Chicago 13, Ill. (2)  
Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (1, 2)  
Eastern Specialty Co., 3617 N. 8th St., Phila. 40, Pa. (2, 3)  
Electric Products Co., 1725 Clarkstone Rd., Cleve-land 12, Ohio (1)  
General Radio Co., 275 Massachusetts Ave., Cam-bridge 39, Mass. (2)  
Guyan Machinery Co., Inc., Box 150, Logan, W. Va. (1)  
Lyon Rural Electric Co., 2075 Moore St., San Diego 12, Calif. (2)  
National Electric Controller Co., 7070 Glenwood Ave., Chicago 26, Ill. (1, 2, 3)  
Ohmite Mfg. Co., 3601 Howard St., Skokie, Ill. (1, 2, 3)  
Rex Rheostat Co., 3 Foxhurst Rd., Baldwin, L. I., N. Y. (1, 2, 3)  
States Co., 19 New Park Ave., Hartford 6, Conn. (3)  
Sticht Co., Inc., Herman H., 27 Park Place, New York 7, N. Y. (2)  
Tech Labs Inc., Bergen & Edsal Bldgs., Palisades Park, N. J. (2, 3)  
Technology Instrument Corp., 531 Main St., Acton, Mass. (2)  
Ward Leonard Electric Co., 115 MacQuesten Park-way, South, Mount Vernon, N. Y. (1)  
Westinghouse Electric Corp., P. O. Box 868, Pitts-burgh 30, Pa. (1, 2)

**RHEOSTATS**, Misc.

Compression—see **CONTROLLERS**, Motor  
Field—see **CONTROLLERS**, Motor, Manual  
Loading—see **RESISTORS**, Unit  
Plating—see **GENERATORS**, DC, Plating

**RIBBON**, Resistance—see **Wire** (Classified as to Usage), Resistance

**RINGS**

1. Bridle  
2. Cable, and Hangers  
3. Collecting

Argo Products Co., 1008 N. 22 St., St. Louis 6, Mo. (2)  
Bryant Mfg. Co., 410 N. Paulina St., Chicago 22, Ill. (1)  
Cable Spinning Equipment Co., 3100 Topeka Ave., Topeka, Kan. (2)  
Cincinnati Pump & Mfg. Co., Inc., 3182 Beekman St., Cincinnati 23, Ohio (2)  
Diamond Expansion Bolt Co., Inc., Garwood, N. J. (1)  
Industrial Electrical Works, 1509 Chicago St., Omaha 2, Neb. (3)  
Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (1, 2)  
Kirkwood Commutator Co., 4835 W. 130 St., Cleveland 11, Ohio (3, 4)  
Makepeace Co., Div. D. E., Union Plate & Wire Co., Pine & Dunham Sts., Attleboro, Mass. (3)  
Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (2)

Porcelain Products, Inc., P. O. Box 300, Findlay, Ohio (1)  
Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (2)  
Shenango-Penn Mold Co., West Third St., Dover, Ohio (3)  
Sherman & Reilly, Inc., 1 Broad St., Chattanooga 2, Tenn. (2)  
Star Expansion Bolt Co., 147 Cedar St., N. Y. 6, N. Y. (1)  
Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (2)  
Superior Porcelain Co., 931 1/2 Market St., Parkers-burg, W. Va. (1)  
Toledo Commutator Co., Owosso, Mich. (3)  
Utilities Service Co., 1 Pine St., Allentown, Pa. (1, 2)

**RINGS**, Misc.

Canopy—see **FITTINGS**, Fixture  
Carbon—see **BRUSHES**, Carbon  
Commutator—see **RINGS**, Collecting

**RIPPERS**, Cable—see **STRIPPERS**

**RIVETS**

1. Brass or Copper  
2. Iron or Steel

Allmetal Screw Products Co., Inc., Garden City, N. Y. (2)  
American Rivet Co., Inc., 849 N. Kedzie Ave., Chicago 51, Ill. (1, 2)  
Atlas Bolt & Screw Co., 1130 Ivanhoe Rd., Cleve-land 10, Ohio (2)  
Bethlehem Steel Co., Bethlehem, Pa. (2)  
Chase Brass & Copper Co., Inc., 236 Grand St., Waterbury 20, Conn. (1)  
Chicago Rivet & Machine Co., 9600 W. Jackson Blvd., Bellwood, Ill. (1, 2)  
Federal Screw Products, Inc., 3917-25 N. Kedzie Ave., Chicago 18, Ill. (1, 2)  
Harper Co., H. M., 8200 Lehigh Ave., Morton Grove, Ill. (1)  
Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (2)  
Steel Co., Herman D., 225 Lafayette Bldg., Phila. 6, Pa. (1, 2)

**RIVETS**—see also **CONTACTS**, Precious Metal

**RODS**

1. Anchor and Guy  
2. Conduit, Cleaning or Fishing  
3. Ground  
4. Lighting  
5. Welding

All-State Welding Alloys Co., Inc., 249-55 Ferris Ave., White Plains, N. Y. (5)  
Aluminum Co. of America, 1501 Alcoa Bldg., Pitts-burgh 19, Pa. (5)  
American Brass Co., 414 Meadow St., Waterbury 20, Conn. (3, 5)  
Arcos Corp., 1500 S. 50 St., Phila. 43, Pa. (5)  
Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y. (2)  
●BLACKBURN CORP., JASPER, 35 Madison St., St. Louis 6, Mo. (3)—ADV. PG. 107  
Brewer-Titchener Corp., 111 Port Watson St., Cortland, N. Y. (1, 3)  
Chance Co., A. B., 210 N. Allen St., Centralia, Mo. (1)  
Chapin Co., Inc., Chas. E., 227 Fulton St., N. Y. 7, N. Y. (5)  
Conduit Nipple Mfg. Co., 1455 Spring Garden Ave., Pittsburgh 12, Pa. (1)  
●COPE, INC., T. J., 711 S. 50 St., Phila. 43, Pa. (2)—ADV. PG. 112-113  
Copperweld Steel Co., Wire and Cable Div., Glass-port, Pa. (1, 3)  
Crucible Steel Co. of America, P. O. Box 88, Henry W. Oliver Bldg., Pittsburgh 30, Pa. (5)  
Diamond Expansion Bolt Co., Inc., Garwood, N. J. (2)  
Dickie Tool Co., 1201 Warren Ave., Downers Grove, Ill. (2)  
Electra Protection Co., Inc., 127 N. Lake Ave., Albany 6, N. Y. (4)  
Electrical Mfg. Co., Box 217, Battle Creek, Mich. (1, 3)  
Goetz Mfg. Co., J. F., 162 South St., Hartford, Wis. (4)  
Haynes Stellite Co., 725 S. Lindsay St., Kokomo, Ind. (5)  
Hobart Bros., Hobart Square, Troy 1, Ohio (5)  
Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa. (1, 3)  
Imminent Protection Co., Inc., 1605-07 S. Main St., Goshen, Ind. (3, 4)  
Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (3)  
Kaiser Aluminum & Chemical Sales, Inc., 919 N. Michigan Ave., Chicago 11, Ill. (5)  
Knox Porcelain Corp., 2706 Wynders Ave. (P. O. Box 2031), Knoxville 1, Tenn. (3)  
Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif. (1, 3, 4)  
Leibfried Mfg. Corp., C. H., 95-101 Guernsey St., Brooklyn 22, N. Y. (1)  
Lincoln Electric Co., 22801 St. Clair Ave., Cleve-land 17, Ohio (5)  
Linde Air Products Co., 30 E. 42 St., N. Y. 17, N. Y. (5)  
Line Material Co., 700 West Michigan St., Mil-waukee, Wis. (1, 3)



## PRODUCT DIRECTORY

M. & W. Electric Mfg. Co., Inc., S. Walnut St. (P. O. Box 87), East Palestine, Ohio (3)  
 National Carbon Co., 30 E. 42 St., N. Y. 17, N. Y. (3, 5)  
 Necco Mfg. Co., 6025 N. Keystone Ave., Chicago 30, Ill. (1)  
 Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (1, 3, 4)  
 Page Steel & Wire Div., American Chain & Cable Co., Inc., First & River Sts., Monessen, Pa. (5)  
 Penn-Union Electric Corp., 315 State St., Erie, Pa. (3)  
 Philco Corp., Tioga & C Sts., Phila. 34, Pa. (3)  
 Premax Products Div., Chisholm-Ryder Co., Inc., Collage & Highland Aves., Niagara Falls, N. Y. (3)  
 Pure Carbon Co., Inc., 441 Hall Ave., St. Marys, Pa. (5)  
 Revere Copper & Brass Inc., 230 Park Ave., N. Y. 17, N. Y. (5)  
 Safety Live Line Tool Co., 973 86th Ave., Oakland 21, Calif. (3)  
 St. Louis Screw & Bolt Co., 6900 N. Broadway, St. Louis 15, Mo. (1)  
 Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa. (1, 3)  
 Stackpole Carbon Co., Tannery St., St. Marys, Pa. (5)  
 Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (2)  
 Utilities Service Co., 1 Pine St., Allentown, Pa. (1, 3)  
 Weaver Co., J. A., 2110 Howard St., St. Louis 6, Mo. (3)  
 Westinghouse Electric Corp., P. O. Box 869, Pittsburgh 30, Pa. (5)  
 Youngstown Sheet and Tube Co., Stambaugh Bldg., Youngstown 1, Ohio (5)  
 White Metal Rolling & Stamping Corp., 80 Moultrie St., Brooklyn 22, N. Y. (5)

### RODS, Misc.

**Composition**—see **INSULATION, Plastic Resistance**—see **WIRE (Classified as to Usage), Resistance Rubber**—see **RUBBER, Hard Threaded**—see **WIRE, Threaded**  
 See also—**ALUMINUM; BRASS; COPPER; ZINC**

### ROLLERS, Cable

Cable Spinning Equipment Co., 3100 Topeka Ave., Topeka, Kan.  
 Dicke Tool Co., 1201 Warren Ave., Downers Grove, Ill.  
 Sherman & Reilly, Inc., 1 Broad St., Chattanooga 2, Tenn.

### ROPE, Wire—see **CABLE (Classified as to Composition), Steel Strand**

### ROPE, Manila or Nylon

Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa.  
 Chance Co., A. B., 210 N. Allen St., Centralia, Mo.  
 Filler Co., Edwin H., Devereaux & Milnor St., Phila. 24, Pa.

### ROSETTES

Bryant Electric Co., 1421 State St., (Box D., Barmouth Sta.), Bridgeport 2, Conn.  
 Circle F. Mfg. Co., 720 Monmouth St., Trenton 4, N. J.  
 Knox Porcelain Corp., 2706 Mynders Ave. (P. O. Box 2031), Knoxville 1, Tenn.  
 Pass & Seymour, Inc., Syracuse 9, N. Y.  
 Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill.

### ROTAMETERS—see **MEASURERS, Map and Plan**

### ROTATORS, Antenna

Alliance Mfg. Co., Lake Park Blvd., Alliance, Ohio  
 Cornell-Dubiler Electric Corp., 333 Hamilton Blvd., South Plainfield, N. J.

### ROUNDELS, Glass Cover Reflectors—see **FIXTURES, Lighting, Special Purpose, Stage**

Capital Stage Lighting Co., Inc., 527 W. 45 St., New York 36, N. Y.  
 Kilegl Bros. Universal Electric Stage Lighting Co., Inc., 321 W. 50 St., N. Y. 19, N. Y.  
 Kopp Glass Inc., 2233 Palmer St., Swissvale, Pa.  
 Lancaster Lens Co., Lancaster, Ohio  
 Miroflex Co., Inc., 148 19th St., Brooklyn 32, N. Y.

### ROUNDLINE—see **TWINE, Marline**

### ROUTERS, Cord Board—see **CUTTERS, Cord, Mat and Board**

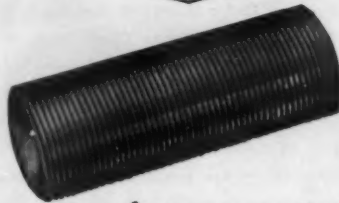
### ROVING—see **YARNS**

### ROUTERS

Casey Mfg. Co., Inc., 31 Lake Drive, Oshkosh, Wis.  
 Duro Metal Products Co., Kildare & Schubert Sts., Chicago, Ill.  
 Porter-Cable Machine Co., 1714 N. Salina St., Syracuse 8, N. Y.  
 Skill Corp., 5033 Elston Ave., Chicago 30, Ill.  
 Stanley Electric Tools, 436 Myrtle St., New Britain, Conn.  
 Tec Imports, 14525 Bessemer St., Van Nuys, Calif.

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### RUBBER

#### 1. Hard 2. Sponge

Atlas Sponge Rubber Co., 806 E. 61 St., Los Angeles 1, Calif. (2)  
 Auburn Mfg. Co., Pease Ave. & Stack St., Middletown, Conn. (2)  
 Chicago Belting Div., Chicago-Allis Mfg. Corp., 125 N. Green St., Chicago 7, Ill. (1)  
 Excelsior Leather Washer Mfg. Co., Inc., 720 Chestnut St., Rockford, Ill. (1, 2)  
 Glade Mfg. Co., 1632 W. 75 Pl., Chicago 20, Ill. (1, 2)  
 Goodyear Industrial Products Co., Inc., 18 Murray St., N. Y., N. Y. (1, 2)  
 Miller Products Co., Inc., 29 Warren St., N. Y. 7, N. Y. (1, 2)  
 Minor Rubber Co., Inc., 51 Ackerman St., Bloomfield, N. J. (1, 2)  
 Stokes Molded Products Div., Electric Storage Battery Co., Taylor & Webster Sts., Trenton, N. J. (1)  
 United States Rubber Co., Mechanical Goods Div., 1230 Avenue of the Americas, New York 20, N. Y. (1, 2)

### RULES, Steel Tape—see **TAPES, Steel**

### RUNNING-THREAD, Conduit

Conduit Nipple Mfg. Co., 1455 Spring Garden Ave., Pittsburgh 12, Pa.  
 Conduit Pipe Products Co., 157 W. Fulton St., Columbus 16, Ohio  
 Electric Tube Products, 74-16 Grand Ave., Maspeth, N. Y.  
 Electrical Fittings Corp., 37-50 57th St., Woodside 77, N. Y.  
 Miller Products Co., Inc., 29 Warren St., N. Y. 7, N. Y.  
 Pipe Coupling Mfrs., Inc., P. O. Box 488, Martins Ferry, Ohio  
 Roller, Inc., Wm. G., 159 Liberty Ave., Mineola, N. Y.  
 Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y.

S

### SADDLES, Misc.

**Crossarm**—see **PINS, Insulator, Metal Guy**—see **HOOKS, Guy, and Plates**  
**Live Line Tong**—see **TOOLS, Live Line Safety**

### SANDERS

#### 1. Hand, Portable 2. Floor

American Floor Surfacing Machine Co., 518 S. St. Clair St., Toledo 3, Ohio (2)  
 Atlas Floor Surfacing Machinery Corp., 248 E. 34 St., New York 16, N. Y. (2)  
 Black & Decker Mfg. Co., Towson 4, Md. (1, 6, 7, 8)  
 Burgess Vibrocrafters, Grayslake, Ill. (1)  
 Clarke Sanding Machine Co., 30 E. Clay Ave., Muskegon, Mich. (1, 2)  
 Cummins Portable Tool Div., John Oster Mfg. Co., 5055 N. Lydell Ave., Milwaukee 17, Wis. (1)  
 Fairchild Camera & Instrument Corp., Fairchild Industries Div., 110 Main St., Burlington, Vt. (1)  
 James Motrola Corp., 432 Fairchild Ave., Stamford, Conn. (1)  
 Mall Tool Co., 7740 S. Chicago Ave., Chicago 19, Ill. (1)  
 Millers Falls Co., 57 Wells St., Greenfield, Mass. (1)  
 Milwaukee Electric Tool Corp., 5352 W. State St., Milwaukee 8, Wis. (1)  
 Nedco Co., 88 Rumford Ave., Waltham 54, Mass. (1)  
 Portable Electric Tools, Inc., 320 W. 83 St., Chicago 20, Ill. (1)  
 Porter-Cable Machine Co., 1714 N. Salina St., Syracuse 8, N. Y. (1)  
 Red Devil Tools, 130 Colt St., Irvington 11, N. J. (2)  
 Skill Corp., 5033 Elston Ave., Chicago 30, Ill. (1, 2)  
 SpeedWay Mfg. Co., 1834 S. 52 Ave., Cicero 50, Ill. (1)  
 Thor Power Tool Co., 175 N. State St., Aurora, Ill. (1)  
 Weller Electric Corp., 808 Packer St., Easton, Pa. (1)  
 Wen Products, Inc., 5808 Northwest Highway, Chicago 31, Ill. (1)  
 Woodward Machine Co., Lighting Div., 4833 Elm-hurst, Detroit 4, Mich. (2)

### SAWS

#### 1. Band, Metal Cutting 2. Bench, Portable 3. Commutator Slotting 4. Concrete Cutting 5. Hand 6. Hand, Electric 7. Hole 8. Jig 9. Power Chain

Acro Tool & Die Works, 4554 Broadway, Chicago 40, Ill. (6)  
 American Floor Surfacing Machine Co., 518 S. St. Clair St., Toledo 3, Ohio (6, 8)  
 Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y. (1)  
 Burgess Vibrocrafters, Grayslake, Ill. (1, 2)  
 Capewell Mfg. Co., 60-70 Governor St., Hartford 2, Conn. (1)  
 Casey Mfg. Co., Inc., 31 Lake Drive, Oshkosh, Wis. (2, 6)  
 Chicago Pneumatic Tool Co., 6 E. 44 St., N. Y. 17, N. Y. (6, 7)  
 Cincinnati Electrical Tool Co., Madison & Edwards Rd., Cincinnati 8, Ohio (6)  
 Clipper Mfg. Co., 2800 Warwick Kansas City 8, Mo. (4)  
 Cummins Portable Tool Div., John Oster Mfg. Co., 5055 N. Lydell Ave., Milwaukee 17, Wis. (6, 8)  
 Dayton Electric Mfg. Co., 126 S. Oakley Blvd., Chicago 12, Ill. (6)  
 DeWalt Inc., Fountain Ave., Lancaster, Pa. (2, 8)  
 Diamond Saw Works Inc., 260 Court St., Buffalo 2, N. Y. (1, 5)  
 Disston & Sons, Inc., Henry Unruh & Milnor Sts., Tacony, Phila. 35, Pa. (1, 5, 9)  
 DoAll Co., 254 N. Laurel Ave., Des Plaines, Ill. (1)  
 Dreier Brothers, Inc., 5642 Lake Park Ave., Chicago 37, Ill. (5)  
 Duro Metal Products Co., Kildare & Schubert Sts., Chicago, Ill. (1, 8)  
 E-Z Way Tool Co., 128 W. Liberty St., Barrington, Ill. (6)  
 Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa. (3)  
 Forsberg Mfg. Co., 125 Seaview Ave., Bridgeport 1, Conn. (1, 6, 8)  
 Holub Industries, Inc., 442 Elm St., Sycamore, Ill. (3)  
 Homelite Corp., 67 Riverdale Ave., Port Chester, N. Y. (9)  
 Hullhorst Tools, Inc., 1915 Nebraska Ave., Toledo 7, Ohio (3)  
 Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill. (3)  
 Kalamazoo Tank & Silo Co., Machine Tool Div., 500 Harrison St., Kalamazoo 16, Mich. (1)  
 Lint, Clyde W., 2323 W. 18 St., Chicago 8, Ill. (6, 7)  
 Mall Tool Co., 7740 S. Chicago Ave., Chicago 19, Ill. (6, 9)  
 Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio (3)  
 Meyers Co., W. F., 1017 Fourteenth St., Bedford, Ind. (3)  
 Millers Falls Co., 57 Wells St., Greenfield, Mass. (1, 2, 6, 7, 8)  
 Milwaukee Electric Tool Corp., 5352 W. State St., Milwaukee 8, Wis. (6)  
 Misner Mfg. Co., Inc., 202-208 Walton St., Syracuse, N. Y.  
 Oxwell Tool Co. Ltd., 928 Broadway, New York 10, N. Y. (5)  
 Portable Electric Tools Inc., 320 W. 83 St., Chicago 20, Ill. (6, 8)

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Porter-Cable Machine Co., 1714 N. Salina St.,  
Syracuse 8, N. Y. (1, 4, 6, 9)  
Robertson and Ruth, Box 534, Elmhurst, Ill. (7)  
Sittler Corp., 18 N. Ada St., Chicago 7, Ill. (3)  
Skill Corp., 5033 Elston Ave., Chicago 30, Ill.  
(2, 6, 9)  
Snap-On Tools Corp., 8028-28th Ave., Kenosha, Wis.  
(7)  
Spartan Saw Works, Inc., 152 Flak Ave., Spring-  
field 7, Mass. (1)  
Speedway Mfg. Co., 1834 S. 52 Ave., Cicero 50,  
Ill. (6)  
Stanley Electric Tools, 436 Myrtle St., New Britain,  
Conn. (6)  
Starrett Co., L. S., 50 Crescent St., Athol, Mass.  
(1)  
Super Tool Co., 21650 Hoover Rd., Detroit 13,  
Mich. (3)  
Syntron Co., 690 Lexington Ave., Homer City, Pa.  
(6)  
Tec Imports, 14525 Bessemer St., Van Nuys, Calif.  
(1, 5, 7)  
Thompson & Son Co., Henry G., 277 Chapel St.,  
New Haven 5, Conn. (1, 5, 7, 8)  
Thor Power Tool Co., 175 N. State St., Aurora,  
Ill. (6)  
Waveland Electric Co., 5542 N. Ashland Ave.,  
Chicago 40, Ill. (3)  
Wells Mfg. Corp., 407 Jefferson St., Three Rivers,  
Mich. (1)  
Wyzenbek & Staff, Inc., 223 N. California Ave.,  
Chicago 12, Ill. (7)

**SAWS, Misc.**  
Rotary Hack—see **SAWS, Hole**  
See also—**TOOLS; HACKSAWS**

**SCAFFOLDS**

1. Demountable
2. Portable
3. Telescoping

Atlas Industrial Corp., 849 39th St., Brooklyn,  
N. Y. (2, 3)  
American Scaffolding Co., P. O. Box 830, Warren,  
Ohio (1, 2)  
Baker-Ross, Inc., 602 W. McCarty St., Indiana-  
polis 6, Ind. (1, 2)  
Beaver-Advance Corp., 12th & Factory Sts., Ell-  
wood City, Pa. (1, 2)  
Economy Engineering Co., 4511 West Lake St.,  
Chicago 24, Ill. (2, 3)  
Leibfried Mfg. Corp., C. H., 95-101 Guernsey St.,  
Brooklyn 22, N. Y. (1, 2)  
Patent Scaffolding Co., Inc., 38-21 12th St., L. I.  
C. 1, N. Y. (1, 2)  
Safway Steel Products, Inc., 6234 W. State St.,  
Milwaukee 13, Wis. (1, 2, 3)

Up-Right, Inc., Up-Right Scaffolds Div., 1013 Par-  
dee St., Berkeley 10, Calif. (1, 2)  
Waco Mfg. Co., 3565 Wooddale Ave., Minneapolis  
16, Minn. (1, 2)  
White Metal Rolling & Stamping Co., 80 Moultrie  
St., Brooklyn 22, N. Y. (2)

**SCALES, Instrument—see DIALS, Instrument**

**SCRAPERS, Slot—see FILES**

**SCREENS, Color, and Filters—see REFLECTORS,**  
**Lighting, Show Window**

**SCREENS, Electrified—see ELECTROCUTORS,**  
**Insect**

**SCREENS, Fish, Electric**

Detjen Corp., Electrocuting Fly Screen Div., Free-  
dom Plains, Pleasant Valley, N. Y.  
Electric Fish Screen Co., 1130 N. Polissetta Pl.,  
Hollywood 46, Calif.

**SCREWDRIVERS**

1. Hand
2. Power-Driven

Aircraft Specialties, Inc., 415 Howard St., Lapeer,  
Mich. (1)  
Barnard Co. Inc., B. S. 128 Lafayette St., New  
York 13, N. Y. (1)  
Bashlin Co., W. M., Bashlin Bldg., Grove City,  
Pa. (1)  
Billings & Spencer Co., 1 Laurel St., Hartford 1,  
Conn. (1)  
Black & Decker Mfg. Co., Towson 4, Md. (2)  
Blackhawk Industries 250 S. Main St., Dubuque,  
Iowa (1)  
Blackhawk Mfg. Co., 5325 W. Rogers, Milwaukee  
46, Wis. (1)  
Bridgeport Hardware Mfg. Corp., 461 Iranistan Ave.,  
Bridgeport 5, Conn. (1)  
Chicago Pneumatic Tool Co., 6 E. 44 St., N. Y.  
17, N. Y. (2)  
Cincinnati Electrical Tool Co., Madison & Edwards  
Rd., Cincinnati 8, Ohio (2)  
Crescent Tool Co., 200 Harrison St., Jamestown,  
N. Y. (1)  
Duro Metal Products Co., Kildare & Schubert Sts.,  
Chicago 11, Ill. (1)  
● **GREENLEE TOOL CO.**, 2136 Twelfth St., Rockford,  
Ill. (1)—ADV. PG. 102-103  
Hunter Tools, 6608 S. Greina Ave., Whittier, Calif.  
(1)  
Irwin Auger Bit Co., 92 Grant St., Wilmington,  
Ohio (1)  
Kedman Co., 233 S. Fifth West St., Salt Lake  
City, Utah (1)

Mall Tool Co., 7740 S. Chicago Ave., Chicago 19,  
Ill. (2)  
Mephisto Tool Co., Inc., Box 16, Hudson, N. Y. (1)  
Miller Equipment Co., Inc., 13th & New Streets,  
Franklin, Pa. (1)  
Milwaukee Electric Tool Corp., 5352 W. State St.,  
Milwaukee 8, Wis. (2)  
Owatonna Tool Co., Owatonna, Minn. (1)  
Oxwall Tool Co. Ltd., 928 Broadway, New York 10,  
N. Y. (1)  
P & C Hand Forged Tool Co., Box 5926, Milwaukee  
P. O., Portland 22, Ore. (1)  
Proto Tools, Box 3519 Terminal Annex, Los Angeles  
54, Calif. (1)  
Quality Tools Corp., New Wilmington, Pa. (1)  
Shelton Plane & Tool Mfg. Co., 1-19 Maple St.,  
Shelton, Conn. (1)  
Skill Corp., 5033 Elston Ave., Chicago 30, Ill. (2)  
Snap-On Tools Corp., 8028-28th Ave., Kenosha,  
Wis. (1, 2)  
Spring Load Mfg. Corp., 3610 First Ave. South,  
Seattle 4, Wash. (1)  
Stevens Walden Inc., 400 Shrewsbury St., Worcester,  
Mass. (1)  
Thor Power Tool Co., 175 N. State St., Aurora,  
Ill. (1, 2)  
Utica Drop Forge & Tool Corp., Utica 4, N. Y. (1)  
Vaco Products Co., 317 E. Ontario St., Chicago 11,  
Ill. (1)  
Vanadium Tool Co., Box 322, Athens, Ohio (1)  
Vichek Tool Co., 3001 E. 87th St., Cleveland 4,  
Ohio (1)  
Wall Mfg. Co., P., P. O. Box 71, Grove City, Pa.  
(2)  
Xcelite Inc., Thorne Ave. at Bank St., Orchard Park,  
N. Y. (1)  
Yankee Tools, Lehigh Ave. & American St., Phila.  
33, Pa. (1)

**SCREWDRIVERS, Insulated—see TOOLS,**  
**Hand, Insulated**

**SCREWEYES, Insulated**

Electric Service Mfg. Co., 17th & Cambria Sts.,  
Phila. 32, Pa.  
Knox Porcelain Corp., 2706 Mynders Ave. (P. O.  
Box 2031), Knoxville 1, Tenn.  
Lint, Clyde W., 2323 W. 18 St., Chicago 8, Ill.  
Porcelain Products, Inc., P. O. Box 300, Findlay,  
Ohio

**SCREWS**

1. Cap and Set
2. Lag
3. Machine, Brass
4. Machine, Iron and Steel
5. Self-Tapping
6. Wood, Brass
7. Wood, Iron and Steel

Alden Products Co., 117 N. Main St., Brockton  
Mass. (1, 2, 4, 7)  
Allen Mfg. Co., Drawer 570, Hartford 2, Conn. (1)  
Allmetal Screw Products Co., Inc., Garden City,  
N. Y. (1, 2, 3, 4, 5, 6, 7)  
Aluminum Co. of America, 1501 Alcoa Bldg., Pitts-  
burgh 19, Pa. (5)  
American Screw Co., West Main St., Willimantic,  
Conn. (3, 4, 5, 6, 7)  
Atlas Bolt & Screw Co., 1130 Ivanhoe Rd., Cleve-  
land 10, Ohio (1, 2, 3, 4, 5)  
Atlas Screw & Specialty Co., 450 Broome St.,  
N. Y., N. Y. (1, 2, 3, 4, 5, 6, 7)  
Blackhawk Industries 250 S. Main St., Dubuque,  
Iowa (3, 4, 5, 6, 7)  
Bristol Co., Waterbury 20, Conn. (1)  
Chase Brass & Copper Co., Inc., 236 Grand St.,  
Waterbury 20, Conn. (1, 2, 3, 6)  
Cincinnati Pump & Mfg. Co., Inc., 3102 Beekman  
St., Cincinnati 23, Ohio (2)  
Electrical Mfg. Co., Box 217, Battle Creek, Mich.  
(2, 7)  
Federal Screw Products, Inc., 3917-25 N. Kedzie  
Ave., Chicago 18, Ill. (1, 2, 3, 4, 5, 6, 7)  
General Cement Mfg. Co., 919 Taylor Ave., Rock-  
ford, Ill. (1, 2, 3, 4, 5)  
Harper Co., H. M., 8200 Lehigh Ave., Morton Grove,  
Ill. (1, 2, 3, 5, 6)  
Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa.  
(2)  
Joslyn Mfg. and Supply Co., 20 N. Wacker Drive,  
Chicago 6, Ill. (7)  
Kortick Mfg. Co., 5600 Third St., San Francisco 24,  
Calif. (1, 2, 4)  
Oliver Iron & Steel Corp., 1014 Oliver Building,  
Pittsburgh 22, Pa. (1, 2)  
Paine Co., Fullerton Ave. & Westgate Rd., Addison,  
Ill. (4, 5, 6, 7)  
St. Louis Screw & Bolt Co., 690 N. Broadway, St.  
Louis 15, Mo. (1, 2, 3, 4)  
Oliver Iron & Steel Corp., 1014 Oliver Building,  
Pittsburgh 22, Pa. (2)  
Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23,  
Pa. (2)  
Shakeproof Div., Illinois Tool Works, St. Charles  
Rd., Elgin, Ill. (5)  
Steel Co., Herman D., 225 Lafayette Bldg., Phila.  
6, Pa. (3, 4)  
Steel Electric Products Co., Inc., 5602 18th Ave.,  
Bryn Mawr 4, N. Y. (1, 2, 3, 4, 5, 6, 7)  
Utilities Service Co., 1 Pine St., Allentown, Pa. (2)  
Western Automatic Machine Screw Co., P. O. Box  
280, Elyria, Ohio (1)  
Yorkville Metal Products Co., 677 Broadway, N. Y.  
12, N. Y. (3, 4, 5, 6, 7)

## PRODUCT DIRECTORY

### SCREWS, Misc.

For—see FITTINGS, Insulator  
Knob—see SCREWDRIVES, Insulated  
Luminous—see PENDANTS, Luminous

### SEALERS, Wrapping—see IRONS, Electric, Sealing

### SEALS

1. Cable End
2. Conduit
3. Hermetic
4. Motor

Adair Mfg. Co., 14900 Lorain Ave., Cleveland 11, Ohio, (1, 2)  
Apleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. (2)  
Automatic and Precision Mfg. Co., 250 Hawthorne Ave., Yonkers 5, N. Y. (3)  
Bowers Mfg. Co., Inc., 6700 Avalon Blvd., Los Angeles 3, Calif. (1, 2)  
Centralab Div., Globe-Union Inc., 900 E. Keefe Ave., Milwaukee 1, Wis. (3)  
Cooper, Hewitt Electric Co., 720-732 Grand St., Hoboken, N. J. (3)  
Crouse-Hinds Co., Syracuse 1, N. Y. (2)  
Electro-Seal Corp., 946 North Ave., Des Plaines, Ill. (3)  
Excelsior Leather Washer Mfg. Co., Inc., 720 Chestnut St., Rockford, Ill. (4)  
Fusite Corp., 8000 Fernview Ave., Cincinnati 13, Ohio (3)  
G & W Electric Specialty Co., 7780 Dante Ave., Chicago 19, Ill. (1, 2)  
Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (1, 2)  
Green, Inc., R. H., 1201 24th St., Oakland 7, Calif. (2)  
Hermetic Seal Products Co., 29 S. Sixth St., Newark 7, N. J. (3)  
International Seal & Knot Protector Co., 109-111 Spring St., New York 12, N. Y. (4)  
Metaltrics, Inc., 677 Broadway, N. Y. 12, N. Y. (1, 2)  
Murray Mfg. Corp., 1250 Atlantic Ave., Brooklyn 16, N. Y. (4)  
Pyle-National Co., 1344 N. Kostner Ave., Chicago 51, Ill. (1, 2)  
Ratnan Mfg. Co., 10 Wall St. (P. O. Box 1745), New Haven 7, Conn. (2)  
Red Seal Electric Co., 6321 Detroit Ave., Cleveland 2, Ohio (1, 2)  
Roller, Inc., Wm. G., 159 Liberty Ave., Mineola, N. Y. (2)  
Rusgreen Mfg. Co., 14262 Birchwood Ave., Detroit 38, Mich. (1)  
● RUSSELL & STOLL CO. INC., 125 Barclay St., N. Y. 7, N. Y. (2)—ADV. PG. THIRD COVER  
Steel Electric Products Co., Inc., 3602 18th Ave., Brooklyn 4, N. Y. (1, 2)

### SEALS, Misc.

Carbon—see BRUSHES, Carbon  
Knockout—see BLANKS, Knockout

### SEARCHLIGHTS—see FLASHLIGHTS; LANTERNS; FIXTURES, Lighting, Special Purpose

### SEATERS, Brush

Co-operative Utilities Co., Inc., 4637-39 Mulberry St., Phila. 24, Pa.  
Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill.  
Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo.  
Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio  
Sittler Corp., 18 N. Ada St., Chicago 7, Ill.  
Waveland Electric Co., 5542 N. Ashland Ave., Chicago 40, Ill.

### SEATS, Pole—see BALCONIES and SEATS, Pole Line

### SEGMENTS, Commutator—see BARS, Commutator

### SEPARATORS

1. Magnetic
2. Storage Battery

Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (1)  
Exide Industrial Div., Electric Storage Battery Co., 42 S. 15 St., Phila. 2, Pa. (2)  
Houdaille-Hershey of Indiana, Inc., Filtration Div., 415 Indianapolis Ave., Lebanon, Ind. (1)  
Magnetic Engineering & Mfg. Co., 850 Van Houten Ave., Clifton, N. J. (1)  
Shrader Co., F. W., 5788 W. Washington Blvd., Culver City, Calif. (1)  
Stearns Magnetic Inc., 698 S. 28th St., Milwaukee 46, Wis. (1)  
United States Rubber Co., Electrical Wire and Cable Dept., 1230 Avenue of the Americas, New York 20, N. Y. (2)  
United States Rubber Co., Mechanical Goods Div., 1230 Avenue of the Americas, New York 20, N. Y. (2)

### SERVICES, Estimating and Pricing

Biddle Trade Publishing Co., 458 S. Spring St., Los Angeles 13, Calif.  
● HENDERSON-HAZEL CORP., 13601 Euclid Ave., Cleveland 12, Ohio—ADV. PG. 4  
Trade Service Publications, Inc., 673 N. Wells St., Chicago 10, Ill.

### SERVOS, Motor and Generator

American Electronics, Inc., 4811 Telegraph Rd., Los Angeles 22, Calif.  
Bogus Electric Mfg. Co., 52 Iowa Ave., Paterson 3, N. J.  
Century Electric Co., 1806 Pine St., St. Louis 3, Mo.  
Daimler Motor Co., 1375 Clay St., Santa Clara, Calif.  
Doelcam Div., Minneapolis-Honeywell Reg. Co., 1400 Soldiers Field Rd., Boston 35, Mass.  
Electric Specialty Co., 211 South St., Stamford, Conn.  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
Magnavox Co., Fort Wayne 4, Ind.  
Raytheon Mfg. Co., Equipment Marketing Div., 100 River St., Waltham 54, Mass.

### SETS

Christmas Tree Lighting—see FIXTURES, Lighting, Special Purpose  
Test—see TESTERS; METERS; ANALYZERS

### SHACKLES

Bolt—see FITTINGS, Insulator; INSULATORS  
Dead-Ending—see CLAMPS, Pole Line, Dead End

### SHADES—see REFLECTORS

### SHAFTS, Flexible

Barton Products, Inc., 819 N. Blanchard, Wheaton, Ill.  
Elliott Mfg. Co., 350 State St., Binghamton, N. Y.  
Jefferson Engineering & Mfg. Co., 269 Walker St., Detroit 7, Mich.  
Kupfrian Mfg. Co., 395 State St., Binghamton, N. Y.  
Mail Tool Co., 7740 S. Chicago Ave., Chicago 19, Ill.  
Martindale Electric Co., 1309 Hird Ave., Cleveland 7, Ohio  
Wysenbeek & Staff, Inc., 223 N. California Ave., Chicago 12, Ill.

### SHEARS

1. Insulation
2. Metal

Bartlett Mfg. Co., 3003 E. Grand Blvd., Detroit 2, Mich.  
Beverly Shear Mfg. Co., 3004 W. 111 St., Chicago 43, Ill.  
Black & Decker Mfg. Co., Towson 4, Md. (2)  
Cleveland Crane & Engineering Co., Wickliffe, Ohio  
Hobbs Mfg. Co., 26 Salisbury St., Worcester, Mass. (1)  
Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo. (1)  
Jefferson Engineering & Mfg. Co., 269 Walker St., Detroit 7, Mich. (2)  
Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio  
Millers Falls Co., 57 Wells St., Greenfield, Mass.  
O'Neil-Irwin Mfg. Co., 427 Eighth Ave., Lake City, Minn.  
Skill Corp., 5033 Elston Ave., Chicago 30, Ill. (2)  
Wiss & Sons Co., J., 11-45 Littleton Ave., Newark 7, N. Y. (1)

### SHEAVES, Manhole

American Hoist and Derrick Co., 63 S. Robert St., St. Paul 1, Minn.  
Cope, Inc., T. J., 711 S. 50 St., Phila. 43, Pa.

### SHEAVES, Misc.

V-Belt—see PULLEYS  
Wire Rope—see BLOCKS

### SHELVING—see FRAMING, Metal Structure

### SHIELDS

1. Duct
2. Expansion
3. Fluorescent Lamp

Arm Expansion Bolt Co., 1540 Boone Ave., Marion, Ohio (2)  
Atlas Screw & Specialty Co., 450 Broome St., N. Y. N. Y. (2)  
Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y. (1)  
Cope, Inc., T. J., 711 S. 50 St., Phila. 43, Pa. (1)  
Diamond Expansion Bolt Co., Inc., Garwood, N. J. (2)  
Haluh Industries, Inc., 442 Elm St., Sycamore, Ill. (2)  
Louverall Lighting Corp., 1770 W. Bertau Ave., Chicago 13, Ill. (3)  
National Lead Co., 111 Broadway, N. Y. 6, N. Y. (2)  
Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (1)

Paine Co., Fullerton Ave. & Westgate Rd., Addison, Ill. (2)  
Rawlplug Co., Inc., 271 Church St., N. Y. 13, N. Y. (2)  
Rocket Devices Corp., 142 Liberty St., New York 6, N. Y. (2)  
Star Expansion Bolt Co., 147 Cedar St., N. Y. 6, N. Y. (2)  
U. S. Expansion Bolt Co., State St. & P. R. R., York, Pa. (2)  
Woodward Machine Co., Lighting Div., 4833 Elmhurst, Detroit 4, Mich. (3)  
Wyon Products Co., Inc., 2292 S. Taylor Rd., Cleveland 18, Ohio (2)

### SHIFTERS, Phase—see CONVERTERS

### SHIMS

1. Guy
2. Motor

Acme Mfg. & Gasket Co., 738 N. 41 St., Phila. 4, Pa. (2)  
Electrical Mfg. Co., Box 217, Battle Creek, Mich. (1)  
Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif. (1)  
Line Material Co., 700 West Michigan St., Milwaukee, Wis. (1)  
Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (1)  
St. Louis Malleable Casting Co., 7701 N. Conduit Ave., St. Louis 15, Mo. (1)  
Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa. (1)  
Spaulding Fibre Co., Inc., 330 Wheeler St., Tonawanda, N. Y. (2)  
Utilities Service Co., 1 Pine St., Allentown, Pa. (1)

### SHOVELS, Pole Hole—see AUGERS

### SHUNTS, Meter

Burlington Instrument Co., Burlington, Iowa.  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa.  
Sensitive Research Instrument Corp., 9 Elm Ave., Mount Vernon, N. Y.  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.

### SHUTTERS

Fan—see LOUVERS  
Spotlight—see FIXTURES, Lighting, Special Purpose, Stage

### SIGNALS

1. Nurse and Doctor Call
2. Traffic

Auth Electric Co., Inc., 34-20 45th St., L. I. C. 1, N. Y. (1)  
Connecticut Telephone & Electric Corp., 70 Britannia St., Meriden, Conn. (1)  
Cooper Hewitt Electric Co., 728-732 Grand St., Hoboken, N. J. (1)  
Couch Co., Inc., S. H., 3 Arlington St., North Quincy 71, Mass. (1)  
Crouse-Hinds Co., Syracuse 1, N. Y. (1, 2)  
Edwards Co., Inc., Norwalk, Conn. (1)  
Executione, Inc., 415 Lexington Ave., N. Y. 17, N. Y. (1, 2)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (2)  
● GRAYBAR ELECTRIC CO. INC. 420 Lexington Ave., N. Y. 17, N. Y. (1)—ADV. PG. 2  
International Business Machines Corp., 590 Madison Ave., N. Y. 22, N. Y. (1)  
Langevin Mfg. Corp., 37 W. 63 St., N. Y. 23, N. Y. (1)  
Marbellia Co., Inc., 27 Warren St., New York 7, New York (2)  
Partrick & Wilkins Co., 51 N. Seventh St., Phila. 6, Pa. (1)  
Russell & Stoll Co., Inc., 125 Barclay St., New York 7, N. Y. (1)  
Scan Instrument Corp., 3909 Irving Park Rd., Chicago 18, Ill. (1)  
Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)  
Spertl Faraday, Inc., 1322 E. Church St., Adrian, Mich. (1)  
Standard Electric Time Co., 129 Logan St., Springfield, Mass. (1)  
Touch-Plate Mfg. Corp., 16530 Garfield, Paramount, Calif. (1)

### SIGNALS—see also ANNUNCIATORS; BELLS; BUZZERS; HORNS; SIRENS

### SIGNS

1. Exit and Directional
2. Internally Lighted
3. Metal or Wood
4. Neon

Aerolux Lights Corp., 653 11th Ave., New York 36, N. Y. (1, 2, 4)  
Altko Mfg. Co., 4242 N. Lincoln Ave., Chicago 18, Ill. (1, 2)  
Argo Products Co., 1008 N. 22 St., St. Louis 6, Mo. (3)  
Art Metal Co., 1814 E. 40 St., Cleveland 3, Ohio (1)



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 Caldwell & Co., Inc., Edward F., 101 Park Ave., N. Y. 17, N. Y. (1)  
 Canadian Radium & Uranium Corp., 630 Fifth Ave., New York 20, N. Y. (1)  
 Capital Stage Lighting Co., Inc., 527 W. 45 St., New York 36, N. Y. (1)  
 Century Lighting Inc., 521 W. 43 St., New York 36, N. Y. (1)  
 Charleston Rubber Co., Stark Industrial Park, Charleston S. C. (3)  
 Cole & Co., Inc., C. W., 320 E. 12 St., Los Angeles 15, Calif. (1, 2)  
 Commercial Reflector & Mfg. Co., 3109 Maple Ave., Los Angeles 11, Calif. (1, 2, 3)  
 Condi-Lite Corp., 889 Broadway, New York 9, N. Y. (1)  
 Cutler Light Mfg. Co., 2026 N. 22 St., Phila. 21, Pa. (2, 3, 4)  
 ● DAY-BRITE LIGHTING, INC., 5411 Bulwer Ave., St. Louis 7, Mo. (1)—ADV. PG. 100-101  
 Dickey-Grabler Co., 10302 Madison Ave., Cleveland 2, Ohio (1, 3)  
 Dietz Co., Henry G., 12-16 Astoria Blvd., Long Island City 2, N. Y. (3)  
 Eastern Metal of Elmira, Inc., 130 Harrison St., Elmira Heights, N. Y. (1, 3)  
 Electric Cord Co., 195 William St., N. Y. 38, N. Y. (1, 2)  
 Federal Sign & Signal Corp., 8726 S. State St., Chicago 19, Ill. (4)  
 Hub Electric Co., 2255 W. Grand Ave., Chicago 12, Ill. (1, 2)  
 K-E Sales Corp., P. O. Box 2228 Gardner Station, St. Louis 9, Mo. (1, 2)  
 Kelly Specialty Co., 5958-60 Washington Blvd., Chicago 44, Ill. (1, 2, 3)  
 Kent Metal Mfg. Co., Inc., 490 Johnson Ave., Brooklyn 37, N. Y. (1, 2, 3)  
 Kirlin Co., 3435 E. Jefferson Ave., Detroit 7, Mich. (1)  
 Kileg Bros. Universal Electric Stage Lighting Co., Inc., 321 W. 50 St., N. Y. 19, N. Y. (1, 2)  
 Lightalams, Inc., 95 Atlanta Ave., Brooklyn 1, N. Y. (1, 2)  
 Lighmore Appliance Corp., 59 Throop Ave., Brooklyn 6, N. Y. (2)  
 Marbleite Co., Inc., 27 Warren St., New York 7, New York (4)  
 Matthews & Co., James H., 3946 Forbes St., Pittsburgh 13, Pa. (1, 3)  
 McElroy-Wiegler, 1102 W. 9th St., Cincinnati 3, Ohio (3)  
 Mica Insulator Co., P. O. Box 1076, Schenectady 1, N. Y. (1, 2)  
 Mine Safety Appliances Co., 201 N. Braddock Ave., Pittsburgh 8, Pa. (3)  
 Nemco Electric Co., 210 Second Ave., Seattle 4, Wash. (1)  
 Perfect-Line Mfg. Corp., Old Country Rd. & Railroad Ave., P. O. Box 65, Hicksville, L. I., N. Y. (1)  
 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)  
 Spencer Industries, 1508 N. Mascher St., Phila. 22, Pa. (1, 2, 3)  
 Utilities Safety Supply Co. Inc., 3112 Indiana Ave., Kansas City 3, Mo. (3)  
 Volt Co., 1636 N. Carlisle St., Phila. 21, Pa. (1, 2)  
 Wama Co., Industrial Bldg., Baltimore 2, Md. (1, 2, 3)  
 Westline Products Div., Western Lithograph Co., 600 E. Second St., Los Angeles 54, Calif. (1, 3)

**SIRENS, Electric**

Auth Electric Co., Inc., 34-20 45th St., L. I. C. 1, N. Y.  
 Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill.  
 Cooper Co., Inc., Clark, 317 N. Market St., Palmyra, N. J.  
 Cooper Hewitt Electric Co., 720-732 Grand St., Hoboken, N. J.  
 Darley & Co., W. S., 2810 Washington Blvd., Chicago 12, Ill.  
 Edwards Co., Inc., Norwalk, Conn.  
 Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa.  
 Federal Sign & Signal Corp., 8726 S. State St., Chicago 19, Ill.  
 Oceanic Electric Products Corp., 187 Water St., New York 38, N. Y.  
 Patrick & Wilkins Co., 51 N. Seventh St., Phila. 6, Pa.  
 Portable Light Co., Inc., 216 William St., N. Y. 38, N. Y.  
 Spert Faraday, Inc., 1322 E. Church St., Adrian, Mich.

**SIRENS, Hazardous Location—see BELLS, Hazardous Location**

**SKIDS, Manhole—see SHEAVES, Manhole**

**SKINNERS, Wire—see STRIPPERS**

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 Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa. (3)  
 Anthony Corp., F. M., 2022 Oakland Ave., Piedmont 11, Calif. (1, 3)  
 Brand & Co., Inc., William, North & Valley Sts., Willimantic, Conn. (2)  
 Brand Dielectrics, Inc., 57 North St., Willimantic, Conn. (3)  
 Buchanan Electrical Products Corp., 237 U. S. Route 22, Hillsdale, N. J. (3)  
 Cam-Lok Div., Empire Products, Inc., 9051 Blue Ash Rd. (Box 90), Cincinnati 36, Ohio (1, 3)  
 Charleston Rubber Co., Stark Industrial Park, Charleston S. C. (2)  
 Cope, Inc., T. J., 711 S. 50 St., Phila. 43, Pa. (1)  
 Dorsey Co., John E., 80 K St., Boston 27, Mass. (2)  
 Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa. (1, 2, 3)  
 Fanner Mfg. Co., Electrical Products Div., Brookside Park, Cleveland 9, Ohio (1)  
 General Electric Co., Chemical & Metallurgical Div., Pittsfield, Mass. (2)  
 General Scientific Equipment Co., 27th & Huntingdon Sts., Phila. 32, Pa. (2)  
 Goodyear Industrial Products Co., Inc., 18 Murray St., N. Y. N. Y. (2)  
 Gries Reproducer Corp., 123 Beechwood St., New Rochelle, N. Y. (2)  
 Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill. (3)  
 Industrial Products Co., 2695 N. Fourth St., Phila. 33, Pa. (2)  
 Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (3)  
 Joy Mfg. Co., H. W. Oliver Bldg., Pittsburgh 22, Pa. (1, 2, 3)  
 Line Material Co., 700 W. Michigan St., Milwaukee, Wis. (3)  
 Mastercraft Plastics Co., Inc., 95-01 150th St., Jamaica 35, N. Y. (2)  
 Mend-It Sleeve Mfg. Co., 136 Bonita Ave., Piedmont 11, Calif. (3)  
 Midwest Rubber Co., 14275 E. Nine Mile Rd., East Detroit, Mich. (2)  
 Miller Products Co., Inc., 29 Warren St., N. Y. 7, N. Y. (2)  
 ● NATVAR CORP., 211 Randolph Ave., Woodbridge, N. J. (2, 3)—ADV. PG. 135  
 Packard Electric Div., General Motors Corp., Warren, Ohio (1, 2)  
 Pekcu Co., 1227 McDonald Ave., Brooklyn 30, N. Y. (3)  
 Penn-Union Electric Corp., 315 State St., Erie, Pa. (3)  
 Richards Mfg. Co. Ltd., 25 Rankin St., Newark 3, N. J. (3)  
 Rusgreen Mfg. Co., 14262 Birwood Ave., Detroit 38, Mich. (3)

Sherman Mfg. Co., H. B., 22 Barney, Battle Creek, Mich. (3)  
 Snyder & Son, Inc., M. L., Jasper & York Sts., Phila. 25, (2)  
 Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (1, 2, 3)  
 Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J. (3)

**SLEEVES, Misc.**

Fiber—see FIBER, Vulcanized  
 Pole Extension—see TOOLS, Pruning  
 Sealing—see CAPS, Plastic Sealing  
 See also—TAPE; TUBES and TUBING

**SLOTTERS, Commutator—see SAWS**

**SNAKE—see TAPES, Steel, Fish**

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5. Incandescent, Locking
6. Incandescent, Medium and Mogul
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9. Multiple, Combined with Plugs
10. Street Lighting, Series
11. Weatherproof

Abolite Lighting Div., Jones Metal Products Co., West Lafayette, Ohio (1, 5, 6, 11)  
 Adjustable Fixture Co., 104 E. Mason St., Milwaukee 2, Wis. (6)  
 Alcor Mfg. Co., 4444 W. Roosevelt Rd., Chicago 24, Ill. (3, 6)  
 Alden Products Co., 117 N. Main St., Brockton, Mass. (1, 2, 3, 5, 6, 8, 9)  
 American Phenolic Corp., 1830 S. 54th St., Chicago 50, Ill. (8, 9)  
 Ampex Corp., 111 Water St., Brooklyn 1, N. Y. (1)  
 Arrow-Hart & Hegeman Electric Co., 103 Hawthorn St., Hartford 6, Conn. (1, 3, 6, 10, 11)  
 Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (1, 5, 6, 11)  
 Bryant Electric Co., Box D, Barnum Station, Bridgeport 2, Conn. (3, 6, 8, 9, 10, 11)  
 Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (1, 2, 3, 6, 8, 9)  
 Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (1, 3, 5, 6, 8, 9, 10, 11)  
 Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (1, 2, 3, 6, 8, 9, 11)  
 Ericson Mfg. Co., 5209 Euclid Ave. (P. O. Box 1401), Cleveland 3, Ohio (1, 8, 9)  
 Fluorocarbon Products Div., United States Gasket Co., 602 N. 10 St. (P. O. Box 93), Camden 1, N. J. (8, 9)  
 Gem Electric Mfg. Co., Inc., 237 37th St., Brooklyn, N. Y. (6, 11)  
 General Electric Co., Construction Materials Div., 285 Boston Ave., Bridgeport 2, Conn. (1, 6, 11)  
 ● GENERAL ELECTRIC CO., Wiring Dept., 95 Hathaway St., Providence 7, R. I. (1, 6, 8, 9, 11)—ADV. PG. 110-111  
 Hubbell, Inc., Harvey, State & Bostwick Ave., Bridgeport 2, Conn. (1, 6)  
 Jackson Electrical Co., 900 W. Van Buren St., Chicago 7, Ill. (6, 11)  
 Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (2, 8, 10)  
 Joy Mfg. Co., H. W. Oliver Bldg., Pittsburgh 22, Pa. (6, 11)  
 Knox Porcelain Corp., 2706 Mynders Ave. (P. O. Box 2031), Knoxville 1, Tenn. (6, 11)  
 Kulka Electric Mfg. Co., Inc., 633 S. Fulton Ave., Mount Vernon, N. Y. (1, 2, 4, 8, 11)  
 Leviton Mfg. Co., Inc., 236 Greenpoint Ave., Brooklyn 22, N. Y. (1, 3, 6, 8, 9, 11)  
 Line Material Co., 700 West Michigan St., Milwaukee, Wis. (6, 10)  
 Major Equipment Co., Inc., 4603 W. Fullerton Ave., Chicago 39, Ill. (6)  
 ● MCGILL MFG. CO., INC., Valparaiso, Ind. (3, 5, 6) ADV. PG. 132  
 Murray Mfg. Corp., 1250 Atlantic Ave., Brooklyn 16, N. Y. (7)  
 Pass & Seymour, Inc., Syracuse 9, N. Y. (3, 5, 6, 11)  
 Philadelphia Electrical & Mfg. Co., 1200-36 N. 31 St., Phila. 21, Pa. (2, 6, 10)  
 Pyle-National Co., 1334 N. Kustner Ave., Chicago 51, Ill. (11)  
 ● RODALE MFG. CO., INC., 6th & Minor Sts., Emmaus, Pa. (1, 6, 11)—ADV. PG. 143  
 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)  
 Spero Electric Corp., 20500 St. Clair Ave., Cleveland 17, Ohio (6, 11)  
 Swisher Co., Inc., 43-34th St., Brooklyn 32, N. Y. (1)  
 Union Insulating Co., Inc., Box 351, Parkersburg, W. Va. (6, 11)  
 Woodhead Co., Daniel, 15 N. Jefferson St., Chicago 6, Ill. (11)  
 Yorkville Metal Products Co., 677 Broadway, N. Y. 12, N. Y. (1, 6)

**SOCKETS, Misc.**

Extension—see CORDS, Extension Socket  
 Fluorescent—see HOLDERS, Fluorescent Lamp



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**WEATHERPROOF**  
**PIGTAIL**  
**SOCKETS**

No. 63310  
CANVAS

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Parkersburg, West Va.

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Alpha Metals, Inc., P. O. Box 34 Bergen Station, 56 Water St., Jersey City 4, N. J.  
Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y.  
Belmont Smelting & Refining Works, Inc., 330 Belmont Ave., Brooklyn 7, N. Y.  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I.  
Chase Brass & Copper Co., Inc., 236 Grand St., Waterbury 20, Conn.  
Division Lead Co., 7742 W. 61st Place, Summit, Ill.  
Dunton Co., M. W., 7 Goff St., Providence, R. I.  
Farralloy Co., 1245 N. 26th St., Phila. 21, Pa.  
Federated Metals Div., American Smelting & Refining Co., 120 Broadway, New York 5, N. Y.  
Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo.  
Johnson Mfg. Co., Inc., 600 Anamosa Rd., Mt. Vernon, Iowa  
Kester Solder Co., 4201 Wrightwood Ave., Chicago 39, Illinois  
Lenk Mfg. Co., 30 Cunningham St., Boston 15, Mass.  
Lukens Metal Co., Thos. F., Hedley & Bath Sts., Phila. 37, Pa.  
Morse Co., Frank W., 1300 Soldiers Field Rd., Boston 35, Mass.  
National Lead Co., 111 Broadway, N. Y. 6, N. Y.  
Okun Co., A. L., 109-02 Van Wyck Expressway, L. I. 20, N. Y.  
Republic Metals Co., 273 Green St., Brooklyn 22, N. Y.  
River Smelting & Refining Co., 4195 Bradley Rd. (P. O. Box 5755), Cleveland 1, Ohio  
Ruby Chemical Co., 68-70 McDowell St. (P. O. Box 62), Columbus 16, Ohio  
United Wire & Supply Corp., 1497 Elmwood Ave., Providence 7, R. I.  
Wall Mfg. Co., P. O. Box 71, Grove City, Pa.

#### SOLDERING MACHINES

Chapman Electrical Works Inc., P. E., 1820 Chouteau Ave., St. Louis 3, Mo.  
Cole Radio Works, 86 Westville Ave., Caldwell, N. J.  
Contact, Inc., Box 244, Maynard, Mass.  
Farrelloy Co., 1245 N. 26 St., Phila. 21, Pa.  
Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill.  
Johnson Mfg. Co., Inc., 600 Anamosa Rd., Mt. Vernon, Iowa  
Luma Electric Equipment Co., 1607 Coining Drive (P. O. Box 132), Toledo, Ohio

Lyon Rural Electric Co., 2075 Moore St., San Diego 12, Calif.  
Marion Electrical Instrument Co., 400 Canal St., Manchester, N. H.  
Sittler Corp., 18 N. Ada St., Chicago 7, Ill.  
St. John Engineering Co., 4131 Lankershim Blvd., North Hollywood, Calif.  
Vermaline Products Co., P. O. Box 222, Hawthorne, N. J.  
Weller Electric Corp., 808 Packer St., Easton, Pa.

**SOLDERING MACHINES—see also IRONS, Electric, Soldering; TOOLS**

#### SOLENOIDS

##### 1. AC and DC

##### 2. Rotary

Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee 4, Wis. (1)  
Automatic Switch Co., 391 Lakeside Ave., Orange, N. J. (1)  
B/W Controller Corp., 2200 E. Maple Rd., Birmingham, Mich. (1)  
Caltron Products Co., 1406 S. Hobart Blvd., Los Angeles 6, Calif. (1)  
Cannon Electric Co., 3209 Humboldt St., Los Angeles 31, Calif. (1)  
Coil Co. of America, Inc., 8 Washington St., Northvale, N. J. (1)  
Connecticut Telephone & Electric Corp., 70 Britannia St., Meriden, Conn. (1)  
Cutter-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (1)  
Dalmator Co., 1375 Clay St., Santa Clara, Calif. (1, 2)  
Dormeyer Industries, 3418 Milwaukee Ave., Chicago 41, Ill. (1, 2)  
Electrical Facilities, Inc., 4224 Holden St., Oakland 8, Calif. (1)  
Electrical Windings, Inc., 2015 N. Kolmar Ave., Chicago 39, Ill. (1, 2)  
General Controls Co., 801 Allen Ave., Glendale, Calif. (1, 2)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1)  
Guardian Electric Mfg. Co., 1621 W. Walnut St., Chicago 12, Ill. (1, 2)  
Haft & Sons, Inc., 950 Kent Ave., Brooklyn 5, N. Y. (1, 2)  
Langevin Mfg. Corp., 37 W. 65 St., N. Y. 23, N. Y. (1)  
Leland, Inc., G. H., 123 Webster St., Dayton 2, Ohio (2)  
Magnavox Co., Fort Wayne 4, Ind. (1)  
National Acme Co., Electrical Mfg. Div., 170 E. 131 St., Cleveland 8, Ohio (1)  
Partrick & Wilkins Co., 51 N. Seventh St., Phila. 6, Pa. (1)  
Phillips Control Corp., 59 W. Washington St., Joliet, Ill. (1)  
Pollak Corp., Joseph, 81-95 Freeport St., Boston 22, Mass. (1)  
Quick Charge, Inc., 1750 N. E. 10th St., Oklahoma City 4, Okla. (1)  
Trombetta Solenoid Corp., 329 N. Milwaukee St., Milwaukee 2, Wis. (1)

**SOLENTS—see CLEANERS; COMPOUNDS**

**SOUND—see SYSTEMS, Communicating**

**SPAGHETTI—see TUBES and TUBING, Flexible Insulating**

**SPEEDS, Digging—see AUGERS**

**SPINDLES, Fixture—see CANOPIES, Fixture**

#### SPINNERS, Cable

Cable Spinning Equipment Co., 3100 Topeka Ave., Topeka, Kan.

**SPLICERS, Cable—see KITS, Cable Splicing**

#### SPINNING, Metal

Admiral Corp., 3800 Cortland St., Chicago 47, Ill.  
Associated Lighting Service, 876 Kaynne St., Redwood City, Calif.  
B M D & R Inc., 7020 Walker St., St. Louis Park, Minneapolis 16, Minn.  
Compco Corp., 2251 W. St. Paul Ave., Chicago 47, Ill.  
MiroFlector Co., Inc., 148 19th St., Brooklyn 32, N. Y.

#### SPLICES, Line

Burndy Engineering Co. Inc., Norwalk, Conn.  
Cam-Lok Div., Empire Products, Inc., 9031 Blue Ash Rd. (Box 98), Cincinnati 36, Ohio  
Javex, P. O. Box 646, Redlands, Calif.  
Preformed Line Products Co., 5349 St. Clair Ave., Cleveland 3, Ohio  
Thomas & Betts Co., Inc., 36 Butler St., Elizabeth, N. J.  
United States Rubber Co., Mechanical Goods Div., 1230 Avenue of the Americas, New York 20, N. Y.

**SPOOLS, Metal Wire—see REELS, Wire**

**SPOOLS, Wood—see HANDLES, Wooden Appliance**

**SPOONS, Pole Hole—see AUGERS**

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F-334 SOLENOID  
F-360 LINE

Stop waste due to excessive solenoid replacement. Call Trombetta for a replacement solenoid which will solve your problem.

Complete line of replacement solenoids ranging from short stroke to long stroke, and high speed solenoids for duty cycles up to 600 operations per minute:

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NA-700 National Acme replacement: all sizes and all modifications  
AL-800 Long Stroke: 3 to 25 lb. pull range; 2" to 4.75" stroke range  
AS-400 Heavy Duty: up to 400 strokes per minute continuously; 7 sizes; 0.5 to 14 lb. pull capacity  
A-100 Direct Current: 5 to 100 lbs. pull, continuous duty; or series operation

#### Derivative Lines

G-200 General Electric replacement: 8 sizes  
G-600 Hydraulic Valve: 3 to 45 lb. pull capacity  
FX-300 Explosion-Resistant: 3 to 100 lbs. pull capacity  
FZ-300 Oil Immersed: 3 to 100 lbs. pull capacity  
RD-300 Solenoid operators (Reversing Solenoid)  
AD-800 Double plunger solenoids  
Positively a solenoid for every imaginable purpose.

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**TROMBETTA SOLENOID CORP.**

MILWAUKEE WISCONSIN  
U.S.A.

**SPOUTS, Magnetic—see SEPARATORS, Magnetic**

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Aerol Products Co., Inc., 69 Wesley St., South Hackensack, N. J. (1)  
Armstrong Products Corp., 7th Ave. & 1st St., (P. O. Box 940), Huntington 12, W. Va. (1)  
Burgess Vibrocrafters, Grayslake, Ill. (1, 2)  
MiroFlector Co., Inc., 148 19th St., Brooklyn 32, N. Y. (2)  
Plummer Spray Equipment Co., 700 Filmore St., Napoleon, Ohio (2)  
Portable Electric Tools, Inc., 320 W. 83 St., Chicago 20, Ill. (1, 2)  
Root-Lowell Corp., 445 N. Lake Shore Dr., Chicago, Ill. (1, 2)  
Tanglefoot Co., 314 Straight Ave., S.W., Grand Rapids 4, Mich. (1)

**SPREADERS, Coil—see WINDERS**

#### SPRINGS, Machinery or Coil

Ace Spring Mfg. Co., Inc., 78 West Houston St., New York 12, N. Y.  
Evan's Sons, Inc., John, 500 N. 13 St., Phila. 23, Pa.

**SPURS, Linemen's—see CLIMBERS, Pole**

**STABILIZERS, Voltage—see REGULATORS, Voltage**

**STACKS, Rectifier—see ELEMENTS, Dry Plate Rectifier**

#### STAIRWAYS, Moving

Westinghouse Electric Corp., Elevator Div., 150 Pacific Ave., Jersey City 4, N. J.  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.

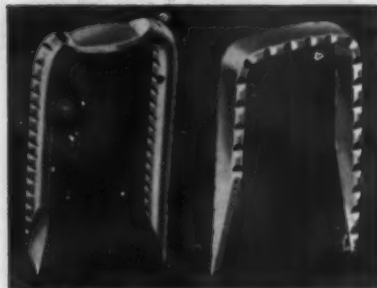
**STAMPING, Fiber—see FIBER, Vulcanized**

#### STAMPS, Time

Cincinnati Time Recorder Co., 733 Central Ave., Cincinnati 14, Ohio  
International Business Machines Corp., 590 Madison Ave., N. Y. 22, N. Y.  
Matthews & Co., James H., 3946 Forbes St., Pittsburgh 13, Pa.



# AMAZING *New* CABLE STAPLES



provide up to 67% greater holding power . . . keep cable installations in place and in safe condition

● **HOLD-TITES REALLY HOLD TIGHT:** New Titchener "Hold-Tite" Cable Staples have barbed edges—to grip the wood and hold firmly. Laboratory tensile tests prove up to 67% greater holding power over same size ordinary staples.

● **HOLD-TITE STAPLES KEEP CABLES IN PLACE:** Ordinary cable staples often drop out or pull out a few days after they're put in. Sagging cables can be dangerous. Use *Hold-Tites*—make sure your flexible cable installations, metallic and non-metallic—stay up where they belong.

● **WILL NOT BEND:** Hold-Tite Staples are made of special analysis steel which doesn't bend or deform—even when hammered into hardest woods. Sharp, even points start straight, go in easily.

● **A COMPLETE LINE:** Available in six sizes. Four in flat wire (7/8", 1", 1 1/8", 1 3/8" inside length), two in round wire, E-Z Drive type (1", 1 1/4" inside length).



Send now for free box of Hold-Tite Staples!

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**STANDARDS, Rotating—see METERS, Electrical Measuring, Watt-Hour Testing**

**STANDARDS, Street Lighting—see POSTS, Street Lamp**

## STANDS

1. Armature
2. Drill
3. Soldering Iron

American Electrical Heater Co., 6100 Cass Ave., Detroit 2, Mich. (3)  
Black & Decker Mfg. Co., Towson 4, Md. (2)  
Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa. (1)  
Hexacon Electric Co., 161 W. Clay Ave., Roselle Park, N. J. (3)  
Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo. (1)  
Lumidor Mfg. Co., 4801 E. 50 St., Los Angeles 58, Calif. (2)  
Milwaukee Electric Tool Corp., 5352 W. State St., Milwaukee 8, Wis. (2)  
Natalie Machine & Tool Co., 339 Highway No. 17, Carlstadt, N. J. (1)  
Porter-Cable Machine Co., 1714 N. Salina St., Syracuse 8, N. Y. (2)  
Potter & Rayfield, Inc., P. O. Box 1042, Atlanta, Ga. (1)  
Snap-On Tools Corp., 8026-28th Ave., Kenosha, Wis. (2)  
Versabar Corp., 517 Communipaw Ave., Jersey City 6, N. J. (1)

## STANDS, Misc.

**Cable Reel—see JACKS, Cable Peel**  
**Infrared Heater and Dryer—see HEATERS, Space, Electric Radiant (Infrared Lamp Fixtures)**  
**Portable Vise—see BENCHES, Portable Vise**

## STAPLERS, Wire

Arrow Fastener Co., Inc., 1 Junius St., Brooklyn 12, N. Y.  
Heller Co., 2135 E. Superior Ave., Cleveland 14, Ohio

## STAPLES

1. Insulated
2. Uninsulated

Arrow Fastener Co., Inc., 1 Junius St., Brooklyn 12, N. Y. (1, 2)  
Blackhawk Industries, 250 S. Main St., Dubuque, Iowa (2)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (1)  
Copperweld Steel Co., Wire and Cable Div., Glassport, Pa. (2)  
Couch Co., Inc., S. H., 3 Arlington St., North Quincy 71, Mass. (1)  
Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (1, 2)  
Electrical Mfg. Co., Box 217, Battle Creek, Mich. (2)  
Fullman Mfg. Co., 1209-1215 Jefferson St., Latrobe, Pa. (2)  
Gem Electric Mfg. Co., Inc., 237 37th St., Brooklyn, N. Y. (1)  
General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill. (1)  
Heller Co., 2135 E. Superior Ave., Cleveland 14, Ohio (2)  
Hughes Bros., Inc., Seward, Neb. (2)  
Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (2)  
Knox Porcelain Corp., 2706 Mynders Ave. (P. O. Box 2031), Knoxville 1, Tenn. (1)  
Lint, Clyde W., 2323 W. 18 St., Chicago 8, Ill. (2)  
Metalelectrics, Inc., 677 Broadway, N. Y. 12, N. Y. (1)

● **MIDWEST ELECTRIC MFG. CO., 1639 Walnut St., Chicago 12, Ill. (2)—ADV. PG. 104-105**  
Rattan Mfg. Co., 10 Wall St. (P. O. Box 1745), New Haven 7, Conn. (2)  
Richards Co., J. R., P. O. Box 482, Carnegie, Pa. (2)  
Rodale Mfg. Co., Inc., 6th & Minor Sts., Emmaus, Pa. (1)  
Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa. (2)  
Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa. (2)  
Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (2)  
Superior Staple Mfg. Co., 40 Commercial St., Fitchburg, Mass. (1)  
Thiel Tool & Engineering Co., 1417 N. Market St., St. Louis 6, Mo. (2)  
Titchener & Co., E. H., 67 Clinton St., Binghamton, N. Y. (2)  
Utilities Service Co., 1 Pine St., Allentown Pa. (2)  
Yorkville Metal Products Co., 677 Broadway, N. Y. 12, N. Y. (1)

## STARTERS, Fluorescent Lamp

Bryant Electric Co., 1421 State St., (Box D., Barnum Sta.), Bridgeport 2, Conn.  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I.

# EASY-DRIVE



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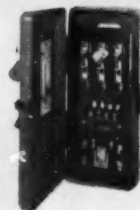
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THIEL Proves the Need of a STURDY—STRONG STAPLE. Drives Straight—Will not Bend under any Hard Hitting Punishment. All Cable Jobs MUST have the Sturdiest of Staples. THIEL has the Newest Improvement in these products—THIEL "Easy-Drive"—"Nail-It"—"Easy On" Straps. Sold by reputable Electrical Wholesale Dealers. Send for free samples.

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CR7008 combination motor starters are used for full-voltage starting of squirrel-cage induction motors. Provide both overload and short-circuit protection. Means of disconnecting motor from line included. Available in three basic forms, consisting of full-voltage starter used in combination with either nonfusable disconnect switch, fused disconnect switch, or circuit breaker. Different types of NEMA standard enclosures available. Ratings include (1) Single-phase: 110 volts—to 7 1/2 hp, 220 volts—to 15 hp, 440-600 volts—25 hp; (2) Two- and three-phase: 110 volts—to 25 hp, 220 volts—to 100 hp, 440-600 volts—to 200 hp.

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**GENERAL ELECTRIC**

## Small A-c Motor Starters



Size 1,  
push-button-operated



Size 0,  
toggle-operated

CR1062 switches are designed for infrequent starting of small a-c motors. Available in general-purpose, dust-tight, watertight, and explosion-proof enclosures and with 2-, 3-, or 4-pole switches. Push-button- or toggle-operated forms available. Pedestals to accommodate these switches can also be furnished. Ratings include: (1) Single-phase: 110 volts—1½ hp, 220 volts—3 hp, 440-600 volts—5 hp; (2) Three-phase: 110 volts—3 hp, 220 volts—5 hp, 440-600 volts—7½ hp.

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**GENERAL ELECTRIC**

Duro-Test Corp., 2321 Hudson Blvd., North Bergen, N. J.  
General Electric Co., Wiring Device Dept., 95 Hathaway St., Providence 7, R. I.  
Hubbell Inc., Harvey, State & Bostwick Ave., Bridgeport 2, Conn.  
Ironbound Operating Co., 110 Polk St., Newark 5, N. J.  
Lloyd Products Co., 225 Chapman St., Providence 5, R. I.  
Luxor Lighting Products, Inc., 350 5th Ave., New York 1, N. Y.  
Marvel Lamp Co., 307 Newark St., Hoboken, N. J.  
Penn Fluorescent Light Mfg. Co., Wm., 1429-33 S. 23 St., Phila. 46, Pa.  
Solar Electric Corp., 121 Central Ave., Warren, Pa.  
Suclear Laboratories Inc., 1197 McCarter Highway, Newark, N. J.  
Surrellite Products Co., 370 E. 152 St., New York 55, N. Y.  
Sylvania Electric Products, Inc., 1740 Broadway, N. Y. 19, N. Y.  
Verd-A-Ray Corp., 615 Front St., Toledo 5, Ohio  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.

### STARTERS, Motor

1. AC
2. AC Synchronous
3. DC

Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee 4, Wis. (1, 2, 3)  
Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (1, 2, 3)  
Arrow-Hart & Hegeman Electric Co., 103 Hawthorn St., Hartford 6, Conn. (1, 2, 3)  
B/W Controller Corp., 2200 E. Maple Rd., Birmingham, Mich. (1)  
Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (1, 2, 3)  
Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (1, 2, 3)  
Electric Controller & Mfg. Co., 4493 Lee Rd., Cleveland 28, Ohio (1, 2, 3)  
Electric Machinery Mfg. Co., 800 Central Ave., Minneapolis 13, Minn. (1, 2)  
Electric Products Co., 1725 Clarkstone Rd., Cleveland 12, Ohio (2)  
Federal Pacific Electric Co., 50 Paris St., Newark 5, N. J. (1, 2, 3)  
Furnas Electric Co., 1067 McKee St., Batavia, Ill. (1, 2, 3)  
Road, Schenectady 5, N. Y. (1, 2, 3)  
General Armature & Mfg. Co., P. O. Box 370, Lock Haven, Pa. (3)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 3)



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- Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn. (1, 3)
- National Acme Co., Electrical Mfg. Div., 170 E. 131 St., Cleveland 8, Ohio (1, 3)
- Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Oklahoma (1, 2)
- Ohio Brass Co., 380 N. Main St., Mansfield, Ohio (3)
- Penn Controls, Inc., Goshen, Ind. (1)
- R-B-M Div., Essex Wire Corp., 131 Godfrey St., Logansport, Ind. (1, 3)
- Rowan Controller Co., 2315 Homewood Ave., Baltimore 18, Md. (1, 2)
- RUSSELL & STOLL CO., INC., 125 Barclay St., N. Y. 7, N. Y. (1)—ADV. PG.—THIRD COVER
- Small Motors Inc., 2076 Elston Ave., Chicago 14, Ill. (1, 3)
- Square D Co., 6060 Rivard St., Detroit 13, Mich. (1, 2, 3)
- Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2, 3)
- WESTINGHOUSE ELECTRIC SUPPLY CO., 40 Wall St., New York 5, N. Y. (1)—ADV. PG.—SECOND COVER

STATIC ELIMINATORS—see NEUTRALIZERS

STATIONS, Push Button—see BUTTONS, Push, Industrial

STEATITE, Formed—see INSULATION, Steatite and Lava

STEMS, Candle Socket—see SOCKETS, Candle

### STEPS

1. Menhole
2. Pole

Alhambra Foundry Co., Ltd., 1147 Meridian Ave., Alhambra, Calif. (1)  
American Crossarm & Conduit Co., 7726 Sheridan Rd., Chicago 28, Ill. (2)  
Brewer-Titchener Corp., 111 Port Watson St., Cortland, N. Y. (2)  
Cope, Inc., T. J., 711 S. 50 St., Phila. 43, Pa. (1)  
Donley Brothers Co., 13938 Miles Ave., Cleveland 5, Ohio (1)  
Electrical Mfg. Co., Box 217, Battle Creek, Mich. (1, 2)  
Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa. (1, 2)  
Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (2)  
Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif. (1, 2)  
Leibfried Mfg. Corp., C. H., 95-101 Guernsey St., Brooklyn 22, N. Y. (1, 2)  
Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (1, 2)  
Revere Electric Mfg. Co., 6017 Broadway, Chicago 40, Ill. (2)  
St. Louis Malleable Casting Co., 7701 N. Conduit Ave., St. Louis 15, Mo. (2)  
Saylor Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa. (2)  
Sweet Iron Works, A. L., 166 Glenwood Ave., Medina, N. Y. (1)  
Utilities Service Co., 1 Pine St., Allentown, Pa. (1, 2)  
Verenich Bros., 517 Communipaw Ave., Jersey City 6, N. J. (1)

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Cooper Hewitt Electric Co., 720-732 Grand St., Hoboken, N. J.  
Electric Hotpack Co., Inc., Cottman Ave. at Melrose St., Phila. 35, Pa.  
Kemlite Laboratories, 1817 W. Grand Ave., Chicago, Ill.  
Sepco Corp., 860 Cross St., Pottstown, Pa.

### STICKS, Switch Disconnecting

Bodendick Tool Co., 325 E. Main St., Taylorville, Ill.  
Chance Co., A. B., 210 N. Allen St., Centrailla, Mo.  
Powercraft Corp., 2215 De Kalb St., St. Louis 4, Mo.  
Safety Live Line Tool Co., 973 86th Ave., Oakland 21, Calif.  
Southern Electrical Equipment Co., 308 W. Bland St., Charlotte 3, N. C.

### STICKS, Misc.

Alligator—see TOOLS, Live Line Safety  
Armature—see WEDGES, Armature  
Brush Seating—see COMPOUNDS, Brush Seating  
Hook—see PULLERS, Fuse: STICKS, Switch  
Live Line Safety—see TOOLS, Live Line Safety

### STOCKS, Conduit Threading

American Pipe Tool Co., 4856 W. Kinzie St., Chicago 44, Ill.  
Beaver Pipe Tools, Inc., 310 Dana Ave. N. E., Warren, Ohio  
Capewell Mfg. Co., 60-70 Governor St., Hartford 2, Conn.  
Nye Tool Co., 4120-30 Fullerton Ave., Chicago 32, Ill.  
Toledo Pipe Threading Machine Co., 1445 Summit St., Toledo 4, Ohio



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Save time and expense on every job

**ONE-PIECE malleable iron** Nail Straps for armored cable, non-metallic cable, rigid conduit, E.M.T. and other strapping purposes. Built to withstand toughest service...long spike provides dependable holding. They save time and money on every job...only a hammer is needed to install.

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Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa.  
Holub Industries, Inc., 442 Elm St., Sycamore, Ill.  
Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill.  
Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo.  
Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio  
Seager Standard Carbon Co., 291 Church St., New York 13, N. Y.  
Snap-On Tools Corp., 8028-28th Ave., Kenosha, Wis.  
Waveland Electric Co., 5542 N. Ashland Ave., Chicago 40, Ill.

### STOVES, Table

Acme Electric Heating Co., 1217 Washington St., Boston 18, Mass.  
Dominion Electric Corp., 150 Elm St., Mansfield, Ohio  
Perfection Industries, Inc., 7609 Platt Ave., Cleveland 4, Ohio

### STRAND, Steel—see CABLE (Classified as to Composition), Steel Strand

### STRAPS

1. Climber
  2. Conduit
  3. Ground
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Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa. (1)  
Blackhawk Industries, 250 S. Main St., Dubuque, Iowa (2)  
Blaco Mfg. Co., 6541 Euclid Ave., Cleveland 3, Ohio (3)  
Bowers Mfg. Co., Inc., 6700 Avalon Blvd., Los Angeles 3, Calif. (2, 3)  
Champion Cable Co., 1805 E. 40 St., Cleveland 3, Ohio (3)  
Diamond Expansion Bolt Co., Inc., Garwood, N. J. (2)  
Duro Fittings Co., 2040 Santa Fe Ave., Los Angeles 21, Calif. (2)  
Electrical Fittings Corp., 37-50 57th St., Woodside 77, N. Y. (2, 3)  
Forsberg Mfg. Co., 125 Seaview Ave., Bridgeport 1, Conn. (1)  
Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (2, 3)  
Green, Inc., R. H., 1201 24th St., Oakland 7, Calif. (2, 3)  
Holub Industries, Inc., 440 Elm St., Sycamore, Ill. (2)

Industrial Products Co., 2695 N. Fourth St., Phila. 33, Pa. (1)  
Klein & Sons, Mathias, 7200 McCormick Rd., Chicago 14, Ill. (1)  
Kline, Sawdye Co., Inc., 163 N. Third St., Phila. 6, Pa. (1)  
Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif. (2)  
Lint, Clyde W., 2323 W. 18 St., Chicago 8, Ill. (2)  
M. & W. Electric Mfg. Co., Inc., S. Walnut St. (P. O. Box 87), East Palestine, Ohio (2, 3)  
Marbelite Co., Inc., 27 Warren St., New York 7, New York (1)  
Merwin Mfg. Co., 19th & German Sts., Erie, Pa. (2)  
Metalelectrics, Inc., 677 Broadway, N. Y. 12, N. Y. (2, 3)  
● **MIDWEST ELECTRIC MFG. CO.**, 1639 Walnut St., Chicago 12, Ill. (2, 3)—ADV. PG. 104-105  
Miller Equipment Co., Inc., 13th & New Streets, Franklin, Pa. (1)  
Minerallac Electric Co., 25 N. Peoria St., Chicago 7, Ill. (2)  
Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (2, 3)  
Packard Electric Div., General Motors Corp., Warren, Ohio (3)  
Paine Co., Fullerton Ave. & Westgate Rd., Addison, Ill. (2)  
Rattan Mfg. Co., 10 Wall St. (P. O. Box 1745), New Haven 7, Conn. (2)  
Reliable Electric Co., 3145 Carroll Ave., Chicago 12, Ill. (3)  
Richards Co., J. R., P. O. Box 482, Carnegie, Pa. (2, 3)  
● **RODALE MFG. CO., INC.**, 6th & Minor Sts., Emmaus, Pa. (3)—ADV. PG. 143  
Roller, Inc., Wm. G., 159 Liberty Ave., Mineola, N. Y. (2)  
Rusgreen Mfg. Co., 14262 Birwood Ave., Detroit 38, Mich. (2)  
Sittler Corp., 18 N. Ada St., Chicago 7, Ill. (3)  
● **STEEL CITY ELECTRIC CO.**, 1207 Columbus Ave., Pittsburgh 33, Pa. (2, 3)—ADV. PG. 124  
Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (2, 3)  
Thepitt Mfg. Co., Gregg & Hammond Sts., Carnegie, Pa. (2)  
Thiel Tool & Engineering Co., 1417 N. Market St., St. Louis 6, Mo. (2)  
Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J. (2)  
Thompson Mfg. Co., 611 Stevens St., Geneva, Ill. (2)  
Utilities Safety Supply Co., Inc., 3112 Indiana Ave., Kansas City 3, Mo. (1)  
Versabar Corp., 517 Communipaw Ave., Jersey City 6, N. J. (2)

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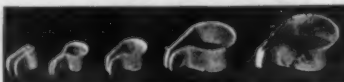
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**NO CUTTING EDGES.** Thick, pliable, rounded edges protect against short circuits—especially under vibration.

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46 stock sizes from 1/8" through 3" in Ethyl Cellulose, Nylon and Saran.



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Designed for Jobs Too Heavy for  
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Fuse—see **WIRE** (Classified as to Usage),  
Protection—see **GUARDS**, Pole Line, Pole  
Resistance—see **WIRE** (Classified as to Usage), Resistance  
Terminal—see **BLOCKS**, Terminal

### STRIPPERS, Wire

Arco Mfg. & Sales Corp., 451 Tenth Ave., New York 18, N. Y.  
Artes Engineering Co., 2757 S. 28 St., Milwaukee, Wis.  
Buck Electrical Mfg. Co., 139 Highland Parkway, Roselle, N. J.  
Burbank Electrical Products, 215 W. Palm Ave., P. O. Box 7, Burbank, Calif.  
Chapman Electrical Works Inc., P. E., 1820 Chouteau Ave., St. Louis 3, Mo.  
Crown Industrial Products Co., 713 Amsterdam St., Woodstock, Ill.  
Ellanar Chemical Co., 2308 Oakton St., Evanston, Ill.  
Fidelity Chemical Products Corp., 470 Frelinghousen Ave., Newark 5, N. J.  
France Mfg. Co., 10325 Berea Rd., Cleveland 2, Ohio  
General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill.  
High Speed Hammer Co., Inc., 312 Norton St., Rochester 21, N. Y.  
Holub Industries, Inc., 442 Elm St., Sycamore, Ill.  
Ideal Industries, Inc., Sycamore, Ill.  
Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo.  
Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio  
Milwaukee Parts Corp., 607-15 S. Sixth St., Milwaukee 4, Wis.  
Potter & Rayfield, Inc., P. O. Box 1042, Atlanta, Ga.  
Rockford Wire Stripper Co., 2323 23rd Ave., Rockford, Ill.  
Rush Wire Stripper Div., Eraser Co., Inc., 1068 S. Clinton St., Syracuse 4, N. Y.  
Sittler Corp., 18 N. Ada St., Chicago 7, Ill.  
Snap-On Tools Corp., 8028-28th Ave., Kenosha, Wis.  
Veco Products Co., 317 E. Ontario St., Chicago 11, Ill.

### STROBOSCOPES

Aerolux Lights Corp., 653 11th Ave., New York 36, N. Y.  
General Radio Co., 275 Massachusetts Ave., Cambridge 39, Mass.



Guider, Roll and Service Co., P. O. Box 3747, Daytona Beach, Fla.  
Kemlite Laboratories, 1817 W. Grand Ave., Chicago, Ill.  
Opad Electric Co., 69 Murray St., New York 7, N. Y.  
Sticht Co., Inc., Herman H., 27 Park Place, New York 7, N. Y.  
Telectro Industries Corp., 35-16 37th St., Long Island City 1, N. Y.  
Vemaline Products Co., P. O. Box 222, Hawthorne, N. J.

# STRUCTURES

1. Mounting, Apparatus
2. Mounting, Instrument
3. Substation
4. Supporting, Cable
5. Supporting, Conduit

Continental Electric Equipment Co., Box 1055, Cincinnati 1, Ohio (1, 2)  
Electrical Engineers Equipment Co., 25th Ave. & Division St., Melrose Park, Ill. (3)  
Hales Electric Co., Orange, Mass. (1, 2)  
Hughes Bros., Inc., Seward, Neb. (3)  
Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (3)  
Kirk & Blum Mfg. Co., 3120 Forrer St., Cincinnati 9, Ohio (2)  
Leibfried Mfg. Corp., C. H., 95-101 Guernsey St., Brooklyn 22, N. Y. (4, 5)  
Littleford Bros., Inc., 453 E. Pearl St., Cincinnati 2, Ohio (2)  
Memo Engineering & Mfg. Co., Inc., Commack, L. I., N. Y. (3)  
Multi-A-Frame Div., Ainsworth Mfg. Corp., 1471-77 Atwater St., Detroit 7, Mich. (1, 2, 4, 5)  
Rowan Controller Co., 2315 Hornwood Ave., Baltimore 18, Md. (1)  
Royal Electric Mfg. Co., 1122 E. 87 St., Chicago 19, Ill. (3)  
● STEEL CITY ELECTRIC CO., 1207 Columbus Ave., Pittsburgh 33, Pa. (4, 5) ADV. PG. 124  
Southern Electrical Equipment Co., 308 W. Bland St., Charlotte 3, N. C. (3, 4)  
Unistrut Products Co., 1013 W. Washington Blvd., Chicago 7, Ill. (1, 2, 3, 4, 5)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (3)

STRUCTURES, Switch — see STRUCTURES, Mounting, Apparatus; SWITCHGEAR, Metal-clad

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Exclusive  
"ONE-SQUEEZE"  
Action for  
2-SECOND  
STRIPPING

of Lighter Gauge Wire  
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National Electric Products Corp., Gateway Center, 140 Stanwix St., Pittsburgh 22, Pa.  
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Ebert Electronics Corp., 212-26 Jamaica Ave., Queens Village 26, L. I., N. Y. (7, 11)  
Electric Controller & Mfg. Co., 4493 Lee Rd., Cleveland 28, Ohio (5, 7, 8)  
Electric Service Engineering Co., 10 Third Ave., Joliet, Ill. (1, 2)  
Electro-Snap Switch & Mfg. Co., 4218-30 W. Lake St., Chicago 24, Ill. (3, 5, 11)  
Electronics Corp. of America, 77 Broadway, Cambridge 42, Mass. (2, 10, 12)  
Euclid Electric & Mfg. Co., 50 Edwards St., Madison, Ohio (8)  
Everhot Products Co., 2009 W. Carroll Ave., Chicago 12, Ill. (13)  
Federal Pacific Electric Co., 50 Paris St. Newark 5, N. J. (9)

Ferrara, Inc., 8106 W. Nine Mile Rd., Oak Park 37, Mich. (13)  
Ferro Electric Products Inc., Kirkland, Ill. (3, 11)  
Fischer & Porter Co., 335 Warminster Rd., Hatboro, Pa. (1, 4, 6, 10)  
Furnas Electric Co., 1067 McKee St., Batavia, Ill. (4, 5, 7, 9, 10)  
Gamewell Co., 1238 Chestnut St., Newton Upper Falls 64, Mass. (2)  
Genco Electric Co., 25685 W. 8 Mile Rd., Detroit 19, Mich. (5)  
General Control Co., 1200 Soldiers Field Rd., Boston 34, Mass. (3, 5)  
General Controls Co., 801 Allen Ave., Glendale, Calif. (3, 5, 6, 7, 10, 11, 12, 13)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (4, 5, 7, 8, 9, 10, 12, 13)  
General Electric Co., Trumbull Components Dept., 41 Woodford Ave., Plainville, Conn. (4)  
Hart Mfg. Co., 110 Bartholomew Ave., Hartford, Conn. (12)  
Haydon Co., A. W., 232 N. Elm St., Waterbury, Conn. (13)  
Hays Mfg. Co., Industrial Sales Div., 12th and Liberty Sts., Erie 6, Pa. (6)  
Healy-Ruff Co., Water Level Controls Div., 2255 University Ave., St. Paul 14, Minn. (4, 6, 10)  
Joy Mfg. Co., H. W. Oliver Bldg., Pittsburgh 22, Pa. (9)  
International Register Co., 2620 W. Washington Blvd., Chicago 12, Ill. (3, 13)  
Iron Firearm Mfg. Co., Electronics Div., 2838 S. E. 9th Ave., Portland 2, Ore. (3, 5, 12, 13)  
Lee Electric, Inc., 132 Beckwith Ave., Paterson, N. J. (2)  
Lektro Laboratories Inc., 154 - 11th Ave., N. Y. 11, N. Y. (13)  
Lindell Electric Control Corp., 384 Canal St., New York 13, N. Y. (4)  
Lyon Rural Electric Co., 2075 Moore St., San Diego 12, Calif. (13)  
Machinery Electrification, Inc., Northboro, Mass. (9, 13)  
Magnetrol, Inc., 2110 S. Marshall Blvd., Chicago 23, Ill. (4, 5, 6)  
McDonnell & Miller Inc., 3500 N. Spaulding Ave., Chicago 18, Ill. (4)  
Merco Corp., 4201 W. Belmont Ave., Chicago 41, Ill. (1, 4, 5, 7, 10, 12)  
Micro Switch Div., Minneapolis-Honeywell Regulator Co., Chicago & Springfield, Ill. (5, 11)  
Miller Harris Instrument Co., 601 E. Ogden Ave., Milwaukee 2, Wis. (13)  
Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn. (1, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13)  
National Acme Co., Electrical Mfg. Div., 170 E. 131 St., Cleveland 8, Ohio (5, 11)  
New Jersey Meter Co., 120 Waynewood Park, Plainfield, N. J. (6)  
Northwestern Clock Co., 703 S. 16 St., Omaha 2, Neb. (3, 13)  
Paragon Electric Co., 1600 - 12th St., Two Rivers, Wis. (13)  
Partlow Corp., 2 Campion Rd., New Hartford, N. Y. (12)  
Partridge & Wilkins Co., 51 N. Seventh St., Phila. 6, Pa. (2)  
Penn Controls, Inc., Goshen, Ind. (4, 5, 6, 7, 10, 11, 12)  
Penn Industrial Instrument Div., Burgess Manning Co., 4110 Haverford Ave., Phila. 4, Pa. (1, 6)  
Peschel Electronics, Inc., 13 Garden St., New Rochelle, N. Y. (13)  
Petter & Brumfield, Princeton, Ind. (13)  
Pyrosil, Inc., 1889 Front St., Cuyahoga Falls, Ohio (3, 12)  
Recora Co., 56 W. 103 St., Chicago 28, Ill. (2, 10)  
Reliance Automatic Lighting Co., 1927 Mead St., Racine, Wis. (13)  
Revere Corp. of America, Wallingford, Conn. (4, 5, 6, 10, 11)  
Roberson Co., L. N., 1539 E. 103 St., Seattle 5, Wash. (12)  
Robot Appliances, Inc., 7041 Orchard St., Dearborn, Mich. (1, 7)  
Rowan Controller Co., 2315 Homewood Ave., Baltimore 18, Md. (4, 5, 7, 9)  
Sangamo Electric Co., 11th & Converse, Springfield, Ill. (3, 13)  
Seely Instrument Co., Inc., 377 Fourth St. (P. O. Box 381), Niagara Falls, N. Y. (13)  
Shure Brothers, Inc., 225 W. Huron St., Chicago 10, Ill. (10)  
Square D Co., 6060 Rivard St., Detroit 11, Mich. (4, 5, 6, 7, 8, 9, 10, 13)  
Standard Electric Div., Standard Dayton Corp., P. O. Box 1001, Dayton 1, Ohio (8)  
Steel Co., Herman D., 225 Lafayette Bldg., Phila. 6, Pa. (13)  
Swedish Iron & Steel Corp., 100 Quimby St., Westfield, N. J. (9)  
Tech Labs Inc., Bergen & Edsall Bldgs., Palisades Park, N. J. (7)  
Techniflex Corp., 85 Jersey Ave., Port Jervis, N. Y. (8)  
Theller Corp., H. J., Ashmont Ave., Whitinsville, Mass. (11)  
Tork Clock Co. Inc., 1 Grove St., Mt. Vernon, N. Y. (3, 13)  
Ulanet Co., George, 413-15 Market St., Newark 5, N. J. (9, 11)  
Unimax Div., W. L. Maxson Corp., 460 W. 34 St., New York 1, N. Y. (5, 11)  
United Electric Controls Co., 85 School St., Watertown 72, Mass. (5, 10, 11, 12)  
U. S. Gauge Div., American Machine & Metals, Inc., Clymer Ave., Sellersville, Pa. (10)  
Vernaline Products Co., P. O. Box 222, Hawthorne, N. J. (13)

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Double Pole  
Two-Circuit

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Laboratories



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Ward Leonard Electric Co., 115 MacQuesten Parkway, South, Mount Vernon, N. Y. (7, 9)  
West Wind Corp., 1800 Airport Way, Seattle 4, Wash. (13)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (4, 5, 7, 9, 11)  
White-Rodgers Electric Co., 1209 Cass Ave., St. Louis 6, Mo. (5, 7, 10, 11, 12, 13)  
Wind-Way Fan & Ventilator Co., 531 St. Joseph St., New Orleans 12, La. (1)  
Workrite Mfg. Co., 2451 Broadway, Santa Monica, Calif. (4, 5, 10)  
Zenith Electric Co., 155 W. Walton St., Chicago 10, Ill. (3, 7, 13)

## SWITCHES, Control, Manual

1. Coin-Operated
2. Delayed Operation
3. Foot
4. Foot, Door Mat
5. Momentary Contact
6. Multiple Selector

A. G. A. Div., Elastic Stop Nut Corp. of America, 1027 Newark Ave., Elizabeth, N. J. (2)  
Acro-Mu Switch Div., Acro Mfg. Co., 2040 E. Main St., Columbus, Ohio (1)  
Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee 4, Wis. (4, 5, 7, 8, 9, 10, 11, 12, 13)  
Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (2, 5, 6)  
Ark-Les Switch Corp., 51 Water St., Watertown, Mass. (6)  
Arrow-Hart & Hegeman Electric Co., 103 Hawthorn St., Hartford 6, Conn. (2, 5, 6)  
Auth Electric Co., Inc., 34-20 45th St., L. I. C. 1, N. Y. (3)  
Automatic Control Co., 995 University Ave., St. Paul 4, Minn. (6)  
Barkley Electric Mfg. Co., 1905 Columbia Ave., Middletown, Ohio (6)  
Bryant Electric Co., 1421 State St. (Box D, Barnum Sta.), Bridgeport 2, Conn. (5)  
Carling Electric, Inc., 505 New Park Ave., West Hartford, Conn. (5)  
Carson Mfg. Co., Inc., 1804 E. 30 St., Indianapolis 18, Ind. (6)  
Centralab Div., Globe-Union Inc., 900 E. Keefe Ave., Milwaukee 1, Wis. (6)  
Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (5)  
Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (3, 5, 6)  
Couch Co., Inc., S. H., 3 Arlington St., North Quincy 71, Mass. (6)  
Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (2, 3, 5, 6)  
Electro-Snap Switch & Mfg. Co., 4218-30 W. Lake St., Chicago 24, Ill. (5, 6)

Electro Switch Corp., King Ave., Weymouth 88, Mass. (5, 6)  
 Ferro Electric Products Inc., Kirkland, Ill. (6)  
 General Control Co., 1200 Soldiers Field Rd., Boston 34, Mass. (2, 3, 5, 6)  
 General Electric Co., Apparatus Sales Div., 1 River Rd., Schenectady 5, N. Y. (2, 5, 6)  
 General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn. (5)  
 General Electric Co., Wiring Device Dept., 95 Hathaway St., Providence 7, R. I. (6)  
 Hart Mfg. Co., 110 Bartholomew Ave., Hartford, Conn. (5, 6)  
 International Instruments, Inc., P. O. Box 2954, New Haven 15, Conn. (6)  
 International Register Co., 2620 W. Washington Blvd., Chicago 12, Ill. (1)  
 J-B-T Instruments, Inc., 441 Chapel St., New Haven 8, Conn. (5, 6)  
 Joy Mfg. Co., H. W. Oliver Bldg., Pittsburgh 22, Pa. (5)  
 Kulka Electric Mfg. Co. Inc., 633 S. Fulton Ave., Mount Vernon, N. Y. (5)  
 Lektra Laboratories Inc., 154-11th Ave., N. Y. 11, N. Y. (2, 3, 5)  
 Leviton Mfg. Co., Inc., 236 Greenpoint Ave., Brooklyn 22, N. Y. (5)  
 Line Material Co., 700 West Michigan St., Milwaukee, Wis. (2)  
 Linemaster Switch Corp., Woodstock, Conn. (3)  
 Micro Switch Div., Minneapolis-Honeywell Regulator Co., Chicago & Spring, Freeport, Ill. (1, 3, 5, 6)  
 Ohmite Mfg. Co., 3601 Howard St., Skokie, Ill. (6)  
 Patrick & Wilkins Co., 51 N. Seventh St., Philadelphia, Pa. (3, 4, 5)  
 Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (5)  
 Poliak Corp., Joseph, 81-95 Freeport St., Boston 22, Mass. (4, 5, 6)  
 Recora Co., 56 W. 103 St., Chicago 28, Illinois (3, 4)  
 Roberson Co., L. N., 1539 E. 103 St., Seattle 5, Wash. (2)  
 Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa. (6)  
 Rowan Controller Co., 2315 Homewood Ave., Baltimore 18, Md. (5, 6)  
 ● RUSSELL & STOLL CO., INC., 125 Barclay St., New York 7, N. Y. (5)—ADV. PG. THIRD COVER  
 Shallcross Mfg. Co., 33 Lincoln Ave., Collingdale, Pa. (5)  
 Shure Brothers, Inc., 225 W. Huron St., Chicago 10, Ill. (5)  
 Square D Co., 6060 Rivington St., Detroit 11, Mich. (1, 3)  
 Tech Labs Inc., Bergen & Edsall Bldgs., Palisades Park, N. J. (6)  
 Touch-Plate Mfg. Corp., 16530 Garfield, Paramount, Calif. (5)  
 Trine Mfg. Corp., 1430 Ferris Place, New York 61, N. Y. (5)



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"On", "Off", handle position "readable" even across the room. Patented, "Vise like" fuse holder and only "2 joints per pole" design give coolest operation. Visible blade construction, guaranteed current brake and accommodation for 4 padlocks provide maximum safety.

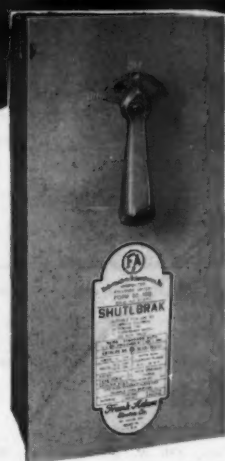
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Specify these switches for motor control, service entrance or for any other job requiring a high quality, long-lasting, trouble-free switch.

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Interlocking fuse doors which automatically lock when the current is on and permits access when the current is off is another feature of these Ⓢ switches. An intermediate position of the operating handle provides access only to authorized persons.

### CAPACITIES:

Type SAHD, with straight handles, 30 to 1200 amps, 250 and 600 volts.

Type SCSD, with rotary handles, 30 to 200 amps, 250 and 600 volts.

*Frank Adam Electric Co.*

P. O. BOX 357

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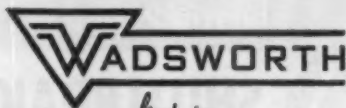
Ulanet Co., George, 413-15 Market St., Newark 5, N. J. (1)  
 Vemaline Products Co., P. O. Box 222, Hawthorne, N. J. (2, 3)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 3, 5, 6)

### SWITCHES, Distribution and Power Circuit

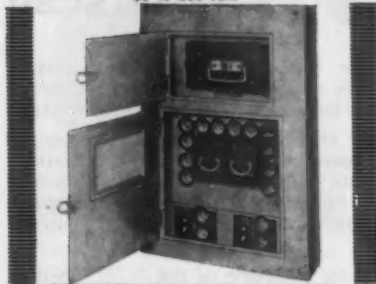
1. Circuit Breaker and Starting Combined
2. Horn Gap
3. Knife
4. Knife, Fused Blade
5. Knife, Quick Break
6. Line and Station Disconnect
7. Oil
8. Panelboard
9. Pressure-Operated
10. Safety
11. Service Entrance
12. Transfer, Automatic

Adam Electric Co., Frank, P. O. Box 357, St. Louis 3, Mo. (10, 11)  
 Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee 4, Wis. (3, 5, 6)  
 Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 2, Wis. (1, 7)  
 American Electric Switch Div., Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (10, 11)  
 Arrow-Hart & Hegeman Electric Co., 103 Hawthorn St., Hartford 6, Conn. (10, 11)  
 Automatic Switch Co., 391 Lakeside Ave., Orange, N. J. (12)  
 Barber Electric Mfg. Co., Inc., 30 Chestnut St., N. Attleboro, Mass. (3)  
 Barkelev Electric Mfg. Co., 1905 Columbia Ave., Middletown, Ohio (3, 4, 5, 6, 8, 10)  
 Brown Boveri Corp., 19 Rector St., N. Y. 6, N. Y. (1, 6)  
 Bryant Electric Co., Box D Barnum Station, Bridgeport 2, Conn. (4, 11)  
 Bulldog Electric Products Co., 7610 Joseph Campau, Detroit, Mich. (8, 10, 11)  
 Carling Electric, Inc., 505 New Park Ave., West Hartford, Conn. (8)  
 Chance Co., A. B., 210 N. Allen St., Centralia, Mo. (6, 9)  
 Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (3, 4)  
 Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (1, 3, 4, 5, 8, 10, 11)  
 ● CROUSE-HINDS CO., Syracuse 1, N. Y. (10)—ADV. PG. 116-117  
 Cutler-Hammer, Inc., 228 N. 12 St., Milwaukee 1, Wis. (1, 3, 5, 6, 7, 8, 9, 10, 11, 12)  
 Delta-Star Electric Div., H. K. Porter Co., Inc., 2437 Fulton St., Chicago 12, Ill. (2, 3, 6)  
 Electric Controller & Mfg. Co., 4493 Lee Rd., Cleveland 28, Ohio (3, 10)  
 Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y. (3, 7)

Electric Products Co., 1725 Clarkstone Rd., Cleveland 12, Ohio (1)  
 Electro-Snap Switch & Mfg. Co., 4218-30 W. Lake St., Chicago 24, Ill. (8, 9, 10, 11)  
 Electro-Switch Corp., King Ave., Weymouth 88, Mass. (8)  
 Emmett Machine & Mfg., Inc., 445 E. Turkeyfoot Lake Rd., Akron 19, Ohio (10)  
 Empire Switchboard Co., Inc., 810 Fourth Ave., Brooklyn 32, N. Y. (3, 4, 5, 8, 9, 11)  
 Federal Pacific Electric Co., 50 Paris St., Newark 5, N. J. (1, 3, 5, 10, 11)  
 G & W Electric Specialty Co., 7780 Dante Ave., Chicago 19, Ill. (7, 12)  
 General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill. (8)  
 General Control Co., 1200 Soldiers Field Rd., Boston 34, Mass. (6, 8)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 3, 6, 7, 8, 9, 10, 11, 12)  
 General Electric Co., Trumbull Components Dept., 41 Woodford Ave., Plainville, Conn. (3, 4, 5, 6, 8, 10, 11)  
 General Nuclear Corp., 550 Fifth Ave., New York 27, N. Y. (3, 4)  
 General Switch Corp., 45 Roebling St., Brooklyn 11, N. Y. (3, 4, 5, 10, 11)  
 ● GRAYBAR ELECTRIC CO., INC., 420 Lexington Ave., N. Y. 17, N. Y. (1)—ADV. PG. 2  
 Hart Mfg. Co., 110 Bartholomew Ave., Hartford, Conn. (2)  
 Hope Electrical Products Co., Inc., 338 Wilson Ave., Newark 5, N. J. (1)  
 Joy Mfg. Co., H. W. Oliver Bldg., Pittsburgh 22, Pa. (1, 10)  
 Kearney Corp., James R., 4236 Clayton Ave., St. Louis 10, Mo. (4, 6, 7, 12)  
 Koltan Electric Mfg. Co., 123 New Jersey Railroad Ave., Newark 5, N. J. (3, 5, 8, 10)  
 Line Material Co., 700 West Michigan St., Milwaukee, Wis. (1, 5, 6, 7, 12)  
 Machinery Electrification, Inc., Northboro, Mass. (1)  
 Memco Engineering & Mfg. Co., Inc., Commack, L. I., N. Y. (2, 6)  
 Mercoid Corp., 4201 W. Belmont Ave., Chicago 41, Ill. (8, 9)  
 Midwest Electric Products, Inc., 1515 N. Front St., Mankato, Minn. (1)  
 Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn. (9, 10)  
 Mengerson's Electrical Machine Works, Inc., 220 E. Nineteenth St. (P. O. Box 1698) Bakersfield, Calif.  
 Murray Mfg. Corp., 1250 Atlantic Ave., Brooklyn 16, N. Y. (3, 4, 5, 10, 11)  
 Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla. (1, 12)  
 Ohio Brass Co., 380 N. Main St., Mansfield, Ohio (3, 5)



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30 to 400 AMP



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Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (3, 4, 5, 6, 8, 9)  
Powercraft Corp., 2215 De Kalb St., St. Louis 4, Mo. (2, 3, 5, 6, 8)  
Pyle-National Co., 1344 N. Kastner Ave., Chicago 51, Ill. (10)  
Recora Co., 56 W. 103 St., Chicago 26, Ill. (9, 10)  
Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa. (1, 2, 6, 7)  
Rowan Controller Co., 2315 Homewood Ave., Baltimore 18, Md. (1, 7, 10)  
Royal Electric Mfg. Co., 1122 E. 87 St., Chicago 19, Ill. (2, 6, 12)  
Royal Switchboard Co., Inc., 460 Driggs Ave., Brooklyn 11, N. Y. (3, 4, 5, 8, 11)  
● **RUSSELL & STOLL CO. INC.**, 125 Barclay St., N. Y. 7, N. Y. (6)—ADV. PG. THIRD COVER  
Southern Electrical Equipment Co., 308 W. Bland St., Charlotte 3, N. C. (1, 2, 3, 4, 6)  
Tigerman Engineering Co., 4332 N. Western Ave., Chicago 18, Ill. (10)  
Square D Co., 6060 Rivard St., Detroit 11, Mich. (1, 4, 5, 6, 8, 9, 10, 11, 12)  
Wadsworth Electric Mfg. Co., Inc., 20-34 W. 11th St. (Box 272), Covington, Ky. (3, 4, 5, 8, 9, 10, 11, 12)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2, 7, 10, 11)  
● **WESTINGHOUSE ELECTRIC SUPPLY CO.**, 40 Wall St., N. Y. 5, N. Y. (1, 4, 9)—ADV. PG. SECOND COVER  
Zenith Electric Co., 155 W. Walton St., Chicago 20, Ill. (8, 12)

#### SWITCHES, Equipment

1. Ammeter
2. Appliance
3. Meter Test
4. Miniature
5. Tool Handle

Acro-Mu Switch Div., Acro Mfg. Co., 2040 E. Main St., Columbus, Ohio (2)  
Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee 4, Wis. (1, 12)  
Bryant Electric Co., 1421 State St. (Box D., Barium Sta.), Bridgeport 2, Conn. (2)  
Carling Electric, Inc., 505 New Park Ave., West Hartford, Conn. (2, 3, 4, 5)  
Centralab Div., Globe-Union Inc., 900 E. Keefe Ave., Milwaukee 1, Wis. (4)  
Cutler-Hammer Inc., 228 N. 12th St., Milwaukee 1, Wis. (5)  
Eastern Specialty Co., 3617 N. 8th St., Phila. 40, Pa. (3)  
Electric Switch Corp., 1340 Eleventh St., Columbus, Ind. (4)

Electro-Snap Switch & Mfg. Co., 4218-30 W. Lake St., Chicago 24, Ill. (2, 3, 4, 5)  
Electro Switch Corp., King Ave., Weymouth 88, Mass. (1)  
Federal Telephone and Radio Co., 100 Kingsland Rd., Clifton, N. J. (4)  
General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill. (2, 3, 4, 5)  
General Control Co., 1260 Soldiers Field Rd., Boston 34, Mass. (4)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1)  
General Electric Co., Trumbull Components Dept., 41 Woodford Ave., Plainville, Conn. (3)  
Globe Industries, Inc., 1784 Stanley Ave., Dayton 4, Ohio (4)  
International Instruments, Inc., P. O. Box 2954, New Haven 15, Conn. (3, 4)  
Meter Devices Co., 1001 Prospect Ave. S. W., Canton 6, Ohio (3)  
Murray Mfg. Corp., 1250 Atlantic Ave., Brooklyn 16, N. Y. (3)  
Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa. (1)  
Pollak Corp., Joseph, 81-95 Freeport St., Boston 22, Mass. (2, 3, 4)  
Revere Corp. of America, Wallingford, Conn. (4)  
Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa. (1, 3, 4)  
Safety Live Line Tool Co., 973 86th Ave., Oakland 21, Calif. (5)  
Shallcross Mfg. Co., 33 Lincoln Ave., Collingdale, Pa. (1, 3, 4)  
Slater Electric & Mfg. Co., Inc., 56th St. & 37 Ave., Woodside 77, N. Y. (2, 4, 5)  
States Co., 19 New Park Ave., Hartford 6, Conn. (3)  
Tech Labs Inc., Bergen & Edsall Blvds., Palisades Park, N. J. (1, 3, 4)  
Unimax Div., W. L. Maxson Corp., 460 W. 34 St., New York 1, N. Y. (4)

#### SWITCHES, Hazardous Location

Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee 4, Wis.  
Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis.  
Arrow-Hart & Hegeman Electric Co., 103 Hawthorn St., Hartford 6, Conn.  
Automatic Switch Co., 391 Lakeside Ave., Orange, N. J.  
Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio  
Crouse-Hinds Co., Syracuse 1, N. Y.  
Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis.  
Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza South, Long Island City 1, N. Y.  
Ebert Electronics Corp., 212-26 Jamaica Ave., Queens Village 28, L. I., N. Y.

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Electric Controller & Mfg. Co., 4493 Lee Rd., Cleveland 28, Ohio  
Electric Switch Corp., 1340 Eleventh St., Columbus, Ind.  
Federal Pacific Electric Co., 50 Paris St., Newark 5, N. J.  
G & W Electric Specialty Co., 7780 Dante Ave., Chicago 19, Ill.  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
General Electric Co., Trumbull Components Dept., 41 Woodford Ave., Plainville, Conn.  
Haydon Co., A. W., 232 N. Elm St., Waterbury, Conn.  
Hope Electrical Products Co., Inc., 338 Wilson Ave., Newark 5, N. J.  
Joy Mfg. Co., H. W. Oliver Bldg., Pittsburgh 22, Pa.  
Killark Electric Mfg. Co., 3940 Easton Ave., St. Louis 13, Mo.  
Merco Corp., 4201 W. Belmont Ave., Chicago 41, Ill.  
Micro Switch Div., Minneapolis-Honeywell Regulator Co., Chicago & Spring, Freeport, Ill.  
Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn.  
Minneapolis-Honeywell Regulator Co., Micro Switch Div., Chicago & Spring, Freeport, Ill.  
National Acme Co., Electrical Mfg. Div., 170 E. 131 St., Cleveland 8, Ohio  
Ohio Brass Co., 380 N. Main St., Mansfield, Ohio  
Pyle-National Co., 1334 N. Kastner Ave., Chicago 51, Ill.  
Rowan Controller Co., 2315 Homewood Ave., Baltimore 18, Md.  
● **RUSSELL & STOLL CO. INC.**, 125 Barclay St., New York 7, N. Y.—ADV. PG. THIRD COVER  
Square D Co., 6060 Rivard St., Detroit 11, Mich.  
United Electric Controls Co., 85 School St., Watertown 72, Mass.  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.  
Workrite Mfg. Co., 2451 Broadway, Santa Monica, Calif.

#### SWITCHES, Misc.

Channel—see **BOXES**, Meter  
Drum—see **CONTROLLERS**, Motor, Manual  
Remote Control—see **SWITCHES**, Control  
Automatic, Magnetic  
Reversing — see **CONTROLLERS**, Motor;  
**SWITCHES**, Distribution, Safety  
Timing—see **TIMERS**; **SWITCHES**, Control  
See also **BREAKERS**; **CONTACTORS**; **CONTROLLERS**; **CONTROLS**; **CUTOUPS**; **PANELBOARDS**; **RELAYS**; **SOLENOIDS**; **STARTERS**; **SWITCHBOARDS**



**SWITCHGEAR, Metalclad**

Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis.  
 Arrow-Hart & Hegeman Electric Co., 103 Hawthorn St., Hartford 6, Conn.  
 Brown Boveri Corp., 19 Rector St., N. Y. 6, N. Y.  
 Brush Alcoa, Inc., 60-07 39th Ave., Woodside 77, Long Island, N. Y.  
 Clement Electric Co., 223 Erie St. N. W., Grand Rapids 2, Mich.  
 Continental Electric Equipment Co., Box 1055, Cincinnati 1, Ohio  
 Electric Products Co., 1725 Clarkstone Rd., Cleveland 12, Ohio  
 Electrical Engineers Equipment Co., 25th Ave. & Division St., Melrose Park, Ill.  
 Empire Switchboard Co., Inc., 810 Fourth Ave., Brooklyn 32, N. Y.  
 Falstrom Co., 62 Falstrom Court, Passaic, N. J.  
 Federal Pacific Electric Co., 50 Paris St., Newark 5, N. J.  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
 Gustavson, Inc., 8600 Chestnut St., Kansas City 30, Mo.  
 I.T.E. CIRCUIT BREAKER CO., 19th & Hamilton Sts., Phila. 30, Pa.—ADV. P.G. 128  
 Joy Mfg. Co., H. W. Oliver Bldg., Pittsburgh 22, Pa.  
 Machinery Electrification, Inc., Northboro, Mass.  
 Marquette Electric Switchboard Co., 311 N. Desplaines St., Chicago 6, Ill.  
 Mullenbach Div., Electric Machinery Mfg. Co., 2300 E. 27 St., Los Angeles 58, Calif.  
 Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Oklahoma  
 Parker Electrical Mfg. Co., 221 Washington St., Oakland 7, Calif.  
 Pelham Electric Mfg. Corp., 16th & German St., Erie, Pa.  
 Roller-Smith Corp., 1000 8th Ave., Bethlehem, Pa.  
 Rowan Controller Co., 2315 Homewood Ave., Baltimore 18, Md.  
 S & C Electric Co., 4435 Ravenswood Ave., Chicago 40, Ill.  
 Snap-On Tools Corp., 8028-28th Ave., Kenosha, Wis.  
 Spaulding Fibre Co., Inc., 310 Wheeler St., Tonawanda, N. Y.  
 Square D Co., 6060 Rivard St., Detroit, 11 Mich.  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.  
 Wisconsin Electrical Mfg. Co., Inc., 4010 W. Douglas Rd., Milwaukee, Wis.

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Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis.

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Representatives  
in Principal Cities



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 General Machine & Welding Works, Inc., P. O. Box 938, Pomona, Calif.

**SYNCHRONIZERS, Automatic**

Arga Div., Beckman Instruments, Inc., 220 Pasadena Ave., South Pasadena, Calif.  
 Electric Machinery Mfg. Co., 800 Central Ave., Minneapolis 13, Minn.  
 Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla.

**SYNCHROSCOPES**

Browning Laboratories, Inc., 750 Main St., Winchester, Mass.  
 DuPont Laboratories, Inc., Allen B., 750 Bloomfield Ave., Clifton, N. J.  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
 Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa.  
 Sylvania Electric Products, Inc., 1740 Broadway, N. Y. 19, N. Y.  
 Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark 5, N. J.

**SYSTEMS, Annunciator—see ANNUNCIATORS; SIGNALS, Nurse and Doctor Call**

**SYSTEMS, Automatic Telemetering—see RECORDERS, Load Totalizing**

**SYSTEMS, Communicating**

1. Calling
2. Carrier Telephone
3. Intercommunicating
4. Public Address
5. Signal

Aircrafters Co., 325 W. Huron St., Chicago 10, Ill. (1, 3)  
 Auth Electric Co., Inc., 34-20 45th St., L. I. C. 1, N. Y. (1, 3, 5)  
 Autocall Co., Shelby, Ohio (1, 5)  
 Automatic Electric Co., 1033 W. Van Buren St., Chicago 7, Ill. (1, 3, 4)  
 Bell Sound Systems, Inc., 55 Marion Rd., Columbus 7, Ohio (3, 4)  
 Benjamin Electric Mfg. Co., Northwest Highway & Seegers Rd., Des Plaines, Ill. (1, 5)  
 Bliss Electronic Corp., Sussex, N. J. (1, 3, 4, 5)  
 Bogen Co., Inc., David, 29 Ninth Ave., N. Y. 14, N. Y. (1, 3, 4)  
 Bristol Motor Div., Vocaline Co. of America, Inc., Coulter St., Old Saybrook, Conn. (3, 4)  
 Connecticut Telephone & Electric Corp., 70 Britannia St., Meriden, Conn. (1, 3, 4, 5)  
 Couch Co., Inc., S. H., 3 Arlington St., North Quincy 71, Mass. (1, 3, 5)

## PRODUCT DIRECTORY

Dalmotron Co., 534 Laurel St., San Carlos, Calif. (3)  
Du Kane Corp., 200 N. 11 St., St. Charles, Ill. (3, 4)  
Electro Devices, Inc., 4025 Easton Ave., St. Louis 13, Mo. (4, 5)  
Edwards Co., Inc., Norwalk, Conn. (1, 3, 5)  
Electro-Voice Inc., 404 Carroll St., Buchanan, Mich. (4)  
Executone, Inc., 415 Lexington Ave., N. Y. 17, N. Y. (4, 5)  
Federal Sign & Signal Corp., 8726 S. State St., Chicago 19, Ill. (1, 5)  
Federal Telephone and Radio Co., 100 Kingsland Rd., Clifton, N. J. (2, 3)  
Gamewell Co., 1238 Chestnut St., Newton Upper Falls 64, Mass. (5)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (2)  
General Electric Co., Electronics Div., Electronics Park, Syracuse, N. Y. (2)  
Godfrey Mfg. Co., 2642 S. Michigan Ave., Chicago 16, Ill. (1, 3, 4)  
● **GRAYBAR ELECTRIC CO., INC.**, 420 Lexington Ave., N. Y. 17, N. Y. (3)—ADV. PG. 2  
Hewlett-Packard Co., 395 Page Mill Rd., Palo Alto, Calif. (2)  
Hose-McCann Telephone Co., Inc., 25th St. & 3rd Ave., Brooklyn 32, N. Y. (3)  
International Business Machines Corp., 590 Madison Ave., N. Y. 22, N. Y. (1, 3, 5)  
Langwin Mfg. Corp., 37 W. 65 St., N. Y. 23, N. Y. (1, 3, 4, 5)  
Line Electric Co., 131 Ogden St., Newark 4, N. J. (1)  
Lope Sound Engineers, J. M., 2171 W. Washington Blvd., Los Angeles 18, Calif. (3)  
Melody Master Mfg. Co., 2842 N. Cicero Ave., Chicago 41, Ill. (3, 4)  
Motorola Communications & Electronics, Inc., 4501 W. Augusta Blvd., Chicago 51, Ill. (1, 2, 5)  
National Inter-Communicating Systems, Inc., 1130 N. Milwaukee Ave., Chicago 22, Ill. (1)  
National Time & Signal Corp., 21800 Wyoming Ave., Detroit 37, Mich. (5)  
New Jersey Fire Alarm Co., 37 S. 8th St., Newark 7, N. J. (5)  
North Electric Mfg. Co., 501 S. Market St., Gallon, Ohio (1, 2, 3, 5)  
Patrick & Wilkins Co., 51 N. Seventh St., Phila. 6, Pa. (2, 5)  
Radio Corp. of America, Engineering Products Div., Front & Cooper Sts., Camden 2, N. J. (1, 3, 4)  
Rauland-Borg Corp., 3515 W. Addison St., Chicago 18, Ill. (3, 4)  
Raytheon Mfg. Co., Equipment Marketing Div., 100 River St., Waltham 54, Mass. (2)  
SAFA Alarm Div., Fry-Far Co., 243 W. Market St., Orrville, Ohio (3, 5)  
Scam Instrument Corp., 3909 Irving Park Rd., Chicago 18, Ill. (5)  
Signal Engineering & Mfg. Co., Branchport Ave., Long Branch, N. J. (5)  
Simpson Mfg. Co., Inc., Mark, 32-28 49th St., Long Island City 3, N. Y. (1, 2, 3, 4)  
Sporti Faraday, Inc., 1322 E. Church St., Adrian, Mich. (1, 3, 5)  
Stromberg Time Corp., 135 S. Main St., Thomaston, Conn. (1, 3, 5)  
Talk-A-Phone Co., 1512 S. Pulaski Rd., Chicago 23, Ill. (3)  
TelAutograph Corp., 16 W. 61 St., New York 23, N. Y. (3)  
Telecom, Inc., 419 Admiral Blvd., Kansas City 6, Mo. (1, 2, 3, 4, 5)  
Telectro Industries Corp., 35-16 37th St., Long Island City 1, N. Y. (1, 2, 3, 4, 5)  
Telephonics Corp., Park Ave., Huntington, N. Y. (3, 4)  
Webster Electric Co., 1900 Clark St., Racine, Wis. (3)  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (5)  
Worner Electronic Devices, Rankin, Ill. (3)

### SYSTEMS, Fire Extinguishing — see EXTINGUISHERS

### SYSTEMS, Lighting

1. **Emergency**  
2. **Low Voltage, Remote Control Switching**  
Associated Lighting Service, 876 Kaynne St., Redwood City, Calif. (2)  
Bogus Electric Mfg. Co., 52 Iowa Ave., Paterson 3, N. J. (1)  
Bristol Co., Waterbury 20, Conn. (2)  
Bryant Electric Co., Box D. Barnum Station, Bridgeport 2, Conn. (2)  
Electric Cord Co., 195 William St., N. Y. 38, N. Y. (1, 2)  
General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn. (2)  
General Electric Co., Wiring Device Dept., 95 Hathaway St., Providence 7, R. I. (2)  
General Scientific Equipment Co., 27th & Huntingdon Sts., Phila. 32, Pa. (1)  
House-O-Lite Corp., 2430 S. Ashland Ave., Chicago 7, Ill. (1)  
Joy Mfg. Co., H. W. Oliver Bldg. Pittsburgh 22, Pa. (1, 2)  
Langwin Mfg. Corp., 37 W. 65 St., N. Y. 23, N. Y. (2)  
Lord-Taber Co., Inc., 40 Ontario St., Canadaigua, N. Y. (2)  
Midwest Electric Products, Inc., 1515 N. Front St., Mankato, Minn. (2)

North Electric Mfg. Co., 501 S. Market St., Gallon, Ohio (2)  
Perkins Battery Co., 1601 Monroe St., York, Pa. (1)  
Portable Light Co., Inc., 216 William St., N. Y. 38, N. Y. (2)  
Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)  
Touch-Plate Mfg. Corp., 16530 Garfield, Paramount, Calif. (2)

## T

### TACHOMETERS

1. **Centrifugal**  
2. **Chronometric**  
3. **Electric**  
4. **Vibrating Reed**  
Aero Instrument Co., 11423 Vanowen St., North Hollywood, Calif. (4)  
Amthor Testing Instrument Co. Inc., 45 Van Sinderen Ave., Brooklyn 7, N. Y. (1, 2)  
Associated Research, Inc., 3758 W. Belmont Ave., Chicago 18, Ill. (1, 2, 3)  
Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland 10, Ohio (3)  
Biddle Co., James G., 1316 Arch St., Phila. 7, Pa. (1, 2, 4)  
Bogue Electric Mfg. Co., 52 Iowa Ave., Paterson 3, N. J. (3)  
Bristol Co., Waterbury 20, Conn. (1, 3)  
Dalmotron Co., 1375 Clay St., Santa Clara, Calif. (3)  
Electric Tachometer Corp., 68th & Upland Sts., Phila. 42, Pa. (3)  
Esterline-Angus Co., Inc., P. O. Box 596, Indianapolis 6, Ind. (3)  
Fielden Instrument Div., Robertshaw-Fulton Controls Co., 2920 N. Fourth St., Phila. 33, Pa. (3)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (3)  
General Radio Co., 275 Massachusetts Ave., Cambridge 39, Mass. (3)  
Globe Industries, Inc., 1784 Stanley Ave., Dayton 4, Ohio (3)  
Hewlett-Packard Co., 395 Page Mill Rd., Palo Alto, Calif. (2, 3)  
Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill. (3)  
Jones Motrola Corp., 432 Fairfield Ave., Stamford, Conn. (1)  
Madison Electric Products, Inc., 119 Lake St., Madison, Ohio (3)  
Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio (1)  
Metron Instrument Co., 432 Lincoln St., Denver 3, Colo. (3)  
Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 3, Minn. (3)  
Minneapolis-Honeywell Regulator Co., Industrial Div., Wayne & Windmills Aves., Phila. 44, Pa. (3)  
Montgomery Tool Co., 7 Tichenor Lane, Newark 5, N. J. (1, 2, 3)  
Reliance Electric & Engineering Co., 1068 Ivanhoe Rd., Cleveland 10, Ohio (3)  
Scherr Co., Inc., George, 200 Lafayette St., N. Y. 12, N. Y. (1, 2)  
Sticht Co., Inc., Herman H., 27 Park Place, N. Y. 7, N. Y. (1, 2, 3, 4)  
Weldenhoff, Inc., Joseph, Algona, Iowa (3)  
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark 5, N. J. (3)  
Zernickow Co., O., 15 Park Row, N. Y. 30, N. Y. (1, 2)

### TACHOMETERS, Stroboscopic—see STROBOSCOPES

### TACKS, Insulated—see NAILS, Wiring; STAPLES, Insulated

### TAGS, Cable, Wire and Cundent

Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y.  
Berry Co., William B., 117 Causeway St., Boston 14, Mass.  
Dickey-Grabler Co., 10302 Madison Ave., Cleveland 2, Ohio  
Hanson Co., C. H., 303 W. Erie St., Chicago 10, Ill.  
Industrial Products Co., 2695 N. Fourth St., Phila. 33, Pa.  
Keyes-Davis Co., 74-14th St., Battle Creek, Mich.  
Matthews & Co., James H., 3946 Forbes St., Pittsburgh 13, Pa.  
National Band & Tag Co., 721 York St., Newport, Ky.  
Premax Products Div., Chisholm-Ryder Co., Inc., College & Highland Aves., Niagara Falls, N. Y.  
Spaulding Fibre Co., Inc., 310 Wheeler St., Tonawanda, N. Y.  
Taylor Fibre Co., Norristown, Pa.  
Westline Products Div., Western Lithograph Co., 600 E. Second St., Los Angeles 54, Calif.  
Wilmington Fibre Specialty Co., New Castle, Dela.

### TAGS, Pole—see NAILS, Pole Doting

### TAMPERS, Pole Hole

Chicago Pneumatic Tool Co., 6 E. 44 St., N. Y. 17, N. Y.  
Dicke Tool Co., 1201 Warren Ave., Downers Grove, Ill.  
Swett Iron Works, A. L., 166 Glenwood Ave., Medina, N. Y.

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2. **Standard**

American Radiator & Standard Sanitary Corp., P. O. Box 1226, Pittsburgh 30, Pa. (2)  
Coates Electric Mfg. Co., 3419-11th Ave. S. W., Seattle 4, Wash.  
Cooper Co., D. C., 1467 S. Michigan Ave., Chicago 5, Ill. (1, 2)  
Jackson Mfg. Co., Inc., W. L., 1222 E. 40 St., Chattanooga, Tenn.  
Koch Sons, Inc., George, P. O. Box 358, Evansville, Ind.  
National Steel Construction Co., Inc., 301 Water St., Logansport, Ind.  
Old Dominion Iron & Steel Corp., Belle Isle, Richmond 3, Va. (1, 2)

### TANKS, Misc.

Dipping—see IMPREGNATORS  
Melting—see POTS, Melting

### TAPERS, Coil

Chapman Electrical Works Inc., P. E., 1820 Chouteau Ave., St. Louis 3, Mo.  
Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa.  
Potter & Rayfield, Inc., P. O. Box 1042, Atlanta, Ga.

### TAPES, Insulating

1. **Asbestos, and Tubing**  
2. **Cotton, and Sleeve**  
3. **Fibrous Glass**  
4. **Varnished or Oiled**  
Auburn Mfg. Co., Pease Ave. & Stack St., Middleboro, Conn. (1, 3, 4)  
Brand Dielectrics, Inc., 57 North St., Willimantic, Conn. (1, 2, 3, 4)  
Clifton Mfg. Co., Inc., Mattapan, Boston 26, Mass. (3)  
General Electric Co., Chemical & Metallurgical Div., Pittsburgh, Mass. (4)  
● **GRAYBAR ELECTRIC CO., INC.**, 420 Lexington Ave., N. Y. 17, N. Y. (1, 2, 3, 4)—ADV. PG. 2  
Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo. (1, 2, 4)  
Irvington Varnish and Insulator Div., Minnesota Mining & Mfg. Co., 6 Argyle Terrace, Irvington 11, N. J. (1, 2, 3, 4)  
John-Manville, 22 E. 40 St., New York 16, N. Y. (1)  
Kassbey & Mattison Co., Butler Ave., Ambler, Pa. (1)  
Kendall Co., Polyken Products Dept., 222 W. Adams St., Chicago 6, Ill. (3)  
Mica Insulator Co., P. O. Box 1076, Schenectady 1, N. Y. (1, 2, 3, 4)

Mitchell Rand Insulation Co., 51 Murray St., N. Y. 7, N. Y. (1, 2, 3, 4)  
 • NATVAR CORP., 211 Randolph Ave., Woodbridge, N. J. (4)—ADV. PG. 135  
 Polyken Products Dept., Kendall Co., 222 W. Adams St., Chicago 6, Ill. (3)  
 Topflight Tape Co., 160 E. 9th Ave., York, Pa. (3)  
 Union Asbestos & Rubber Co., 332 S. Michigan Ave., Chicago 4, Ill. (1)  
 United States Rubber Co., Mechanical Goods Div., 1230 Avenue of the Americas, New York 20, N. Y. (3)  
 Van Cleef Bros., Inc., Div. of Johns-Manville, 7800 S. Woodlawn Ave., Chicago 19, Ill. (1)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2, 3, 4)

# TAPES, Splicing

1. Friction
2. Friction and Rubber, Combined
3. Plastic
4. Rubber
5. Self-Adhesive

• ACCURATE MFG. CO., 44 Hepworth Place, Garfield, N. J. (1, 3, 4)—ADV. PG. 92  
 Appleton Rubber Co., Inc., 57 Cornwall St., Boston 30, Mass. (1, 3, 4)  
 Bishop Mfg. Corp., 10 Canfield Rd., Cedar Grove, N. J. (3, 5)  
 Boston Woven Hose & Rubber Co., P. O. Box 1071, Boston 3, Mass. (1, 2, 3, 4)  
 Brady Co., W. H., 727 W. Glendale Ave., Milwaukee 12, Wis. (3, 5)  
 Bright Star Industries, 600 Getty Ave., Clifton, N. J. (1, 3, 4)  
 Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (1, 2, 3, 4)  
 Chase & Sons, Inc., Randolph, Mass. (1, 3, 4)  
 Clifton Mfg. Co., Inc., Mattapan, Boston 26, Mass. (1, 3, 4)  
 Connecticut Hard Rubber Co., Box 1911, New Haven 9, Conn. (4, 5)  
 Dryden Rubber Div., Sheller Mfg. Corp., 1014 S. Kildare Ave., Chicago 24, Ill. (1, 4)  
 Fluorocarbon Products Div., United States Gasket Co., 602 N. 10 St. (P. O. Box 93), Camden 1, N. J. (3)  
 General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill. (1)  
 Goodrich Co., B. F., Industrial Products Div., 500 S. Main St., Akron, Ohio (1, 2, 3, 4)  
 • GRAYBAR ELECTRIC CO., INC., 420 Lexington Ave., N. Y. 17, N. Y. (1)—ADV. PG. 2  
 Haartz-Mason, Inc., 270 Pleasant St., Watertown 72, Mass. (1, 3, 4)  
 Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill. (1, 2, 3, 4)



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 Irvington Varnish and Insulator Div., Minnesota Mining and Mfg. Co., 6 Argyle Terrace, Irvington 11, N. J. (3)  
 Jenkin Bros., 100 Park Ave., N. Y. 17, N. Y. (1, 3, 4)  
 Johns-Manville, 22 E. 40 St., New York 16, N. Y. (1, 3, 4)  
 Joy Mfg. Co., Electrical Connector Div., 1201 Macklind Ave., St. Louis 10, Mo. (3, 4)  
 Joy Mfg. Co., H. W. Oliver Bldg., Pittsburgh 22, Pa. (3, 4)  
 Labelon Tape Co., Inc., 450 Atlantic Ave., Rochester 9, N. Y. (3, 5)  
 Minnesota Mining and Mfg. Co., Electrical Products Div., 900 Fauquier Ave., St. Paul 6, Minn. (3, 4)  
 Mitchell Rand Insulation Co., 51 Murray St., N. Y. 7, N. Y. (1, 3, 4)  
 • NATVAR CORP., 211 Randolph Ave., Woodbridge, N. J. (3)—ADV. PG. 135  
 New York Belting & Packing Co., 1 Market St., Passaic, N. J. (1, 3, 4)  
 Okonite Co., 220 Passaic St., Passaic, N. J. (1, 2, 3, 4, 5)  
 Permacel Tape Corp., U. S. Highway # 1, New Brunswick, N. J. (5)  
 Plymouth Rubber Co., Inc., 23 Revere St., Canton, Mass. (1, 3, 4)  
 Polyken Products Dept., Kendall Co., 222 W. Adams St., Chicago 6, Ill. (3, 5)  
 Polymer Corp. of Pa., Reading, Pa. (3)  
 Respro Inc., 530 Wellington Ave., Cranston 10, R. I. (3, 4, 5)  
 Rusgreen Mfg. Co., 14262 Birwood Ave., Detroit 38, Mich. (1, 2, 3, 4)  
 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)  
 Superior Insulating Tape Co., 3100 Lambdin Ave., St. Louis 15, Mo. (1, 3, 4)  
 Tech Labs Inc., Bergen & Edsall Bldgs., Palisades Park, N. J. (3)  
 Topflight Tape Co., 160 E. 9th Ave., York, Pa. (5)  
 United States Rubber Co., Mechanical Goods Div., 1230 Avenue of the Americas, New York 20, N. Y. (1, 2, 3, 4)  
 Westline Products Div., Western Lithograph Co., 600 E. Second St., Los Angeles 54, Calif. (5)

# TAPES, Steel

1. Fish
  2. Measuring
- Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill.  
 Arrolt Corp., Foot of Bower St., Montgomery, Pa. (1)  
 Barnard Co., Inc., B. S., 128 Lafayette St., N. Y. 13, N. Y. (1)

Blackhawk Mfg. Co., 5325 W. Rogers, Milwaukee 46, Wis.  
 Burbank Electrical Products, 215 W. Palm Ave. (P. O. Box 7), Burbank, Calif.  
 • COPE, INC., T. J., 711 S. 50 St., Phila. 43, Pa. (1)—ADV. PG. 112-113  
 Fullman Mfg. Co., 1209-1215 Jefferson St., Latrobe, Pa. (1)  
 Holub Industries, Inc., 442 Elm St., Sycamore, Ill.  
 Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill.  
 Lew Electric Fittings Co., 627 W. Lake St., Chicago 6, Ill. (1)  
 Rattan Mfg. Co., 2323 W. 18 St., Chicago 8, Ill. (1)  
 • MIDWEST ELECTRIC MFG. CO., 1639 Walnut St., Chicago 12, Ill.—ADV. PG. 104-105  
 Oxwall Tool Co., Ltd., 926 Broadway, New York 10, N. Y.  
 Rattan Mfg. Co., 10 Wall St. (P. O. Box 1745), New Haven 7, Conn.  
 Richards Co., J. R., P. O. Box 482, Carnegie, Pa.  
 Roe & Sons, Inc., Justus, 1 Roe Court, Patchogue, N. Y. (2)  
 Roller, Inc., Wm. G., 159 Liberty Ave., Mineola, N. Y.  
 Snap-On Tools Corp., 8028-28th Ave., Kenosha, Wis. (2)  
 Starrett Co., L. S., 50 Crescent St., Athol, Mass.  
 Steel City Electric Co., 1207 Columbus Ave., Pittsburgh 33, Pa.  
 Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y.  
 Thomas & Betts Co., Inc., 36 Butler St., Elizabeth, N. J. (1)

# TAPES, Misc.

Braided Copper—see CONDUCTORS, Braided Copper  
 Cambric—see TAPES, Insulating, Varnished or Oiled  
 Mica—see MICA, Ground, Raw, and Plate

TAPS, Cable—see CONNECTORS, Cable and Wire

TELEMETERS—see RECORDERS, Load Totalizing

# TELEPHONES

Auth Electric Co., Inc., 34-20 45th St., L. I. C. 1, N. Y.  
 Bliss Electronic Corp., Sussex, N. J.  
 Connecticut Telephone & Electric Corp., 70 Britannia St., Meriden, Conn.  
 Couch Co., Inc., S. H., 3 Arlington St., North Quincy 71, Mass.  
 • CROUSE-HINDS CO., Syracuse 1, N. Y.—ADV. PG. 116-117



# Sound powered TELEPHONES NEED NO CURRENT



For temporary use on construction work, these instruments move with the job as it progresses. Also for permanent installation on industrial projects. Indoor or outdoor models in selective or common ringing and semi-selective or common talking.

Positive communication is assured at all times because no batteries or current of any kind are required. Cost of upkeep is negligible.

Photo shows Model "K" Phone in use on Niagara River project. General Contractors, Herbert F. Darling, Williamsville, N. Y.

WRITE FOR ILLUSTRATED CATALOG



Du Kane Corp., 200 N. 11 St., St. Charles, Ill.  
Federal Telephone and Radio Co., 100 Kingsland Rd., Clifton, N. J.  
Hose-McCann Telephone Co., Inc., 25th St. & 3rd Ave., Brooklyn 32, N. Y.  
North Electric Mfg. Co., 501 S. Market St., Galion, Ohio  
Partrick & Wilkins Co., 91 N. Seventh St., Phila. 6, Pa.  
Radio Corp. of America, Engineering Products Div., Front & Cooper Sts., Camden 2, N. J.  
Roanwell Corp., 662 Pacific St., Brooklyn 17, New York  
Roch Co., Inc., Paul C., 11 Park Pl., New York 7, N. Y.  
Telecom, Inc., 1019 Admiral Blvd., Kansas City 6, Mo.  
Telephonics Corp., Park Ave., Huntington, N. Y.  
Wheeler Insulated Wire Co., 150 E. Aurora St., Waterbury 20, Conn.

## TELEVISION, Industrial

Blonder-Tongue Laboratories, Inc., 526-36 North Ave., Westfield, N. J.  
Diamond Power Specialty Corp., P. O. Box 415, Lancaster, Ohio  
General Electric Co., Electronics Div., Electronics Park, Syracuse, N. Y.  
Jerrold Electronics Corp., 26th & Dickinson Sts., Phila. 46, Pa.  
Kay Lab, 5725 Kearney Villa Rd., San Diego 12, Calif.  
Philco Corp., Tioga & C Sts., Phila. 34, Pa.  
Radio Corp. of America, Engineering Products Div., Front & Cooper Sts., Camden 2, N. J.  
Raytheon Mfg. Co., Equipment Marketing Div., 100 River St., Waltham 54, Mass.  
Todd Products Co., Inc., 156 Gramatan Ave., Mount Vernon, N. Y.

## TERMINALS

### 1. Battery 2. Hermetically Sealed

American Lava Corp., Cherokee Blvd. & Mfrs. Rd., Chattanooga 3, Tenn. (2)  
Ark-Les Switch Corp., 51 Water St., Watertown, Mass. (2)  
Burndy Engineering Co., Inc., Norwalk, Conn. (1)  
Champion Cable Co., 1805 E. 40 St., Cleveland 3, Ohio (1)  
Dossert Mfg. Corp., 249-255 Huron St., Brooklyn 22, N. Y. (1)  
Exide Industrial Div., Electric Storage Battery Co., 42 S. 15 St., Phila. 2, Pa. (1)  
Fusite Corp., 6000 Fernview Ave., Cincinnati 13, Ohio (2)  
Hermetic Seal Products Co., 29 S. Sixth St., Newark 7, N. J. (2)  
International Resistance Co., 401 N. Broad St., Phila. 8, Pa. (2)  
Krueger & Hudepohl, Inc., 5 E. Third St., Cincinnati 2, Ohio (2)  
Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J. (2)  
Triple-A Specialty Co., 2101 Walnut St., Chicago 12, Ill. (1)

## TERMINALS, Misc.

Cable and Wire—see LUGS and TERMINALS, Cable and Wire; POTHEADS; BLOCKS, Terminal  
Ground—see CLAMPS, Ground

## TESTERS

### 1. Armature 2. Battery, Cell, Portable 3. Circuit, High Voltage 4. Circuit, Low Voltage 5. Insulation 6. Metal Composition 7. Oil 8. Protective Device 9. Rotation

Aerolux Lights Corp., 653 11th Ave., New York 36, N. Y. (3, 4, 5)  
Airsco Mfg. Co., Inc., 435 Melwood St., Pittsburgh 13, Pa. (4)  
Associated Research, Inc., 3758 W. Belmont Ave., Chicago 18, Ill. (3)  
Biddle Co., James G., 1316 Arch St., Phila. 7, Pa. (5, 9)  
Brach Mfg. Corp., 200 Central Ave., Newark, N. J. (4)  
Burton-Rogers Co., 42 Carleton St., Cambridge 42, Mass. (1, 2)  
Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (2, 4)  
Central Scientific Co., 1700 Irving Pk. Rd., Chicago 13, Ill. (7)  
Chapman Electrical Works Inc., P. E., 1820 Chouteau Ave., St. Louis 3, Mo. (1, 5)  
Columbia Technical Corp., 5 E. 57 St., N. Y. 22, N. Y. (1)  
Dice Co., J. W., Englewood, N. J. (4, 5)  
Doelcam Div., Minneapolis-Honeywell Reg. Co., 1400 Soldiers Field Rd., Boston 35, Mass. (5)  
EPCO Electronics, Inc., 140 Liberty St., N. Y. 6, N. Y. (5)  
Eastern Specialty Co., 3617 N. 8th St., Phila. 40, Pa. (5)  
Elitzen Co., Louis C., 17 W. 60 St., New York 23, N. Y. (7)  
Electrical Facilities, Inc., 4224 Holden St., Oakland 8, Calif. (4)

## IDEAL Voltage Tester

NEW... You Can't Buy a Safer Tester — To Save Your life!

### • DEMOUNTABLE CENTER PROD

— mounts or demounts instantly. Just hold case in one hand and second prod in other. Indicator always safely in line of vision.

### • DOUBLE PROTECTION

...a solenoid, calibrated indicator that shows nominal line voltage AND a neon test lamp, each independent of the other... NO CHANCE OF FAILURE TO DETECT VOLTAGE! Other safety and superior performance features include: ... double strength, seamless plastic case — shielded-tip prod storage within case case — precision layer-wound coil — moisture-tight prod handles molded to leads — safety rings on handles—plastic name plate bonded to case, no surface metal—"fog-free" windings over indicator and test lamp keep out dirt. Tests for voltage—AC or DC—frequency—circuit continuity, etc.

Catalog No. 61-004—with carrying case  
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IDEAL INDUSTRIES, Inc.  
5136 Park Ave. • Sycamore, Illinois

Electro Devices, Inc., 4025 Easton Ave., St. Louis 13, Mo. (5)  
Elwood Corp., 2180 Elmwood Ave., Buffalo 23, N. Y. (4)  
Fleron & Son, M. M., 113 N. Broad St., Trenton 8, N. J. (3, 4)  
Flood City Brass & Electric Co., Messenger & Elder Sts., Johnstown, Pa. (1)  
Fox Products Co., 4720 N. 18 St., Phila. 41, Pa. (2)  
Freed Transformer Co., Inc., 1718 Weirfield St., Brooklyn 27, N. Y. (2, 4)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (5, 7)  
General Electronic Distributing Co., 98 Park Pl., New York 7, N. Y. (4, 5)  
General Radio Co., 275 Massachusetts Ave., Cambridge 39, Mass. (5)  
General Scientific Equipment Co., 27th & Huntingdon Sts., Phila. 32, Pa. (1, 2)  
Hewson Co., Inc., 443 Broad St., Newark 2, N. J. (5)  
Hoyer Industries Inc., 471 Cortlandt St., Belleville 9, N. J. (2)  
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland 8, Ohio (2)  
Holtzer-Cabot Div., National Pneumatic Co., Inc., 125 Amory St., Boston 19, Mass. (5)  
Holub Industries, Inc., 442 Elm St., Sycamore, Ill. (4)  
Ideal Industries, Inc., 5136 Park Ave., Sycamore, Ill. (5)  
Industrial Instruments Inc., 89 Commerce Rd., Cedar Grove, N. J. (5, 7)  
Industrial Transformer Corp., Gouldsboro, Pa. (5)  
Instrument Laboratories, 315 W. Walton Pl., Chicago 10, Ill. (4)  
Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo. (1)  
International Instruments, Inc., P. O. Box 2954, New Haven 15, Conn. (4)  
Keystone Electronics Corp., 423 Broome St., New York 13, N. Y. (4)  
Magnatran, Inc., 248 Schuyler Ave., Kearny, N. J. (5)  
Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio (1, 4, 5)  
McColpin-Christie Corp., 3410 W. 67 St., Los Angeles 43, Calif. (2)  
Minerallac Electric Co., 25 N. Peoria St., Chicago 7, Ill. (8)  
Multi-Amp Corp., 10 Third St., Newark 7, N. J. (8)  
Opad Electric Co., 69 Murray St., New York 7, N. Y. (2)  
Peschel Electronics, Inc., 13 Garden St., New Rochelle, N. Y. (3, 4, 5, 7)

Quick Charge, Inc., 1750 N. E. 10th St., Oklahoma City 4, Okla. (2)  
Radio City Products Co., Inc., Centre and Glendale Sts., Easton, Pa. (2, 3, 4)  
Reiner Electronics Co., 152 W. 25 St., New York 1, N. Y. (2)  
Roale Mfg. Co., Inc., 6th & Minor Sts., Emmaus, Pa. (4)  
Schauer Mfg. Corp., 4500 Alpine Ave., Rossmore, Ohio (1)  
Shallcross Mfg. Co., 33 Lincoln Ave., Collingsdale, Pa. (3, 4)  
Sittler Corp., 18 N. Ada St., Chicago 7, Ill. (3, 4)  
Slaughter Co., 1700 Nicklin Ave., Piqua, Ohio (5)  
Square D Co., 6060 Rivard St., Detroit 11, Mich. (3, 4)  
Stewart Bros. Div., Instrument Laboratories, 315 W. Walton Pl., Chicago 10, Ill. (4)  
Sticht Co., Inc., Herman H., 27 Park Place, N. Y. 7, N. Y. (4, 5)  
Technology Instrument Corp., 531 Main St., Acton, Mass. (3, 4)  
Teleco Industries Corp., 35-16 37th St., Long Island City 1, N. Y. (2, 3, 4, 5)  
Triple-A Specialty Co., 2101 Walnut St., Chicago 12, Ill. (2)  
United Mfg. Co., 41 Haig St., Hamden 14, Conn. (3, 4, 5, 9)  
Venus Products Co., 6627 S. Ashland Ave., Chicago 36, Ill. (3, 9)  
Victor Instrument Mfg. Co., Inc., 33 W. 60 St., New York 23, N. Y. (2)  
Waveland Electric Co., 5542 N. Ashland Ave., Chicago 40, Ill. (4)  
Western Electro-Mechanical Co. Inc., 300 Broadway, Oakland 7, Calif. (3)  
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark 5, N. J. (1, 3, 4, 5)  
Whirlpool Corp., St. Joseph, Mich. (3)  
Wing Mfg. Co., L. J., Linden, N. J. (3, 4)

# TESTERS, Misc.

Fuse—see INDICATORS, Blown Fuse  
Megnet—see METERS, Electrical Measuring, Flux  
Motor Torque—see DYNAMOMETERS, Testing  
Resistance—see BOXES, Resistance; OHM-METERS  
Tong—see TESTERS, Circuit  
See also ANALYZERS; METERS; GROWLERS

# THAWERS, Pipe

Aeroil Products Co., Inc., 69 Wesley St., South Hackensack, N. J.  
Harold Electric Co., 210 E. Alder St., Walla Walla, Wash.  
Hobart Bros., Hobart Square, Troy 1, Ohio  
Insto-Gas Corp., 1977 E. Woodbridge St., Detroit 7, Mich.

# THAWERS, Pipe—see also HEATERS, Space, Electric Radiant (Heating Cable)

# THERMOCOUPLES

Assembly Products, Inc., Chesterland 31, Ohio  
Barber-Colman Co., P. O. Drawer 99, 1300 Rock St., Rockford, Ill.  
Biddle Co., James G., 1316 Arch St., Phila. 7, Pa.  
Bristol Co., Waterbury 20, Conn.  
Fielden Instrument Div., Robertshaw-Fulton Controls Co., 2920 N. Fourth St., Phila. 33, Pa.  
General Controls Co., 801 Allen Ave., Glendale, Calif.  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
Illinois Testing Laboratories, Inc., 420 N. LaSalle St., Chicago 10, Ill.  
J-B-T Instruments, Inc., 441 Chapel St., New Haven 8, Conn.  
Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn.  
Minneapolis-Honeywell Regulator Co., Industrial Div., Wayne & Windrim Aves., Phila. 44, Pa.  
Nelson Electric Mfg. Co., 217 N. Detroit Ave., Tulsa 3, Okla.  
Pacific Transducer Corp., 11836 W. Pico Blvd., Los Angeles 64, Calif.  
Permy Equipment Co., 893 Chambers Rd. (Station A, Box 153), Columbus Ohio  
Precision Tube Co., Inc., Church Rd. & Wissahickon Ave., North Wales, Pa.  
Richards Co., Inc., Arklay St., 9 Winchester St., Newton Highlands 61, Mass.  
Sensitive Research Instrument Corp., 9 Elm Ave., Mount Vernon, N. Y.  
Triplett Electrical Instrument Co., 236 Harmon Rd., Bluffton, Ohio  
West Instrument Corp., 525 N. Noble St., Chicago 22, Ill.  
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark 5, N. J.

# THERMOMETERS

1. Battery  
2. Electric, Recording  
3. Transformer  
Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland 10, Ohio

Barber-Colman Co., P. O. Drawer 99, 1300 Rock St., Rockford, Ill.  
Bristol Co., Waterbury 20, Conn. (2)  
Electric Hotpack Co., Inc., Cottman Ave. at Melrose St., Phila. 35, Pa.  
Fielden Instrument Div., Robertshaw-Fulton Controls Co., 2920 N. Fourth St., Phila. 33, Pa.  
General Scientific Equipment Co., 27th & Huntingdon Sts., Phila. 32, Pa.  
Kimble Glass Co., Box 1035, Toledo 1, Ohio  
Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn. (2)  
Pacific Transducer Corp., 11921 W. Pico Blvd., Los Angeles 64, Calif. (3)  
Pacific Transducer Corp., 11836 W. Pico Blvd., Los Angeles 64, Calif.  
Partlow Corp., 2 Campion Rd., New Hartford, N. Y.  
U. S. Gauge Div., American Machine & Metals, Inc., Clymer Ave., Sellersville, Pa.  
West Instrument Corp., 525 N. Noble St., Chicago 22, Ill.  
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark 5, N. J. (2, 3)

# THERMOSTATS

A-P Controls Corp., 2450 N. 32 St., Milwaukee 45, Wis.  
Acra Electric Corp., 9901 Pacific Ave., Franklin Park, Ill.  
American Silver Co., Inc., Industrial Div., 36-07 Prince St., Flushing 54, N. Y.  
AutoFIRstop Co., 2035 Washington Ave., Phila. 46, Pa.  
Barber-Colman Co., P. O. Drawer 99, 1300 Rock St., Rockford, Ill.  
Bristol Co., Waterbury 20, Conn.  
Burling Instrument Co., Inc., 16 River Rd., Chatham, N. J.  
Crouse-Hinds Co., Syracuse 1, N. Y.  
Crown Controls Co., Inc., 40-44 S. Washington St., New Bremen, Ohio  
Despatch Oven Co., 619 S. E. 8th St., Minneapolis 14, Minn.  
Electric Hotpack Co., Inc., Cottman Ave. at Melrose St., Phila. 35, Pa.  
Electronics Corp. of America, 77 Broadway, Cambridge 42, Mass.  
Fenwal Inc., Pleasant St., Ashland, Mass.  
Fulton Syphon Div., Robertshaw-Fulton Controls Co., Box 400, Knoxville, Tenn.  
General Controls Co., 801 Allen Ave., Glendale, Calif.  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
H-B Instrument Co., American & Bristol Sts., Philadelphia 40, Pa.  
Hart Mfg. Co., 110 Bartholomew Ave., Hartford, Conn.  
Iron Fireman Mfg. Co., 3170 W. 106 St., Cleveland 11, Ohio  
Iron Fireman Mfg. Co., Electronics Div., 2838 S. E. 9th Ave., Portland 2, Ore.  
Lord-Taber Co., Inc., 40 Ontario St., Canadagua, N. Y.  
Lyon Rural Electric Co., 2075 Moore St., San Diego 12, Calif.  
Mechanical Industries Production Co., 217-223 Ash St., Akron 8, Ohio  
Mercoild Corp., 4201 W. Belmont Ave., Chicago 41, Ill.  
Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn.  
Partlow Corp., 2 Campion Rd., New Hartford, N. Y.  
Penn Controls, Inc., Goshen, Ind.  
Precision Thermometer & Instrument Co., 1434 Brandywine St., Philadelphia 30, Pa.  
Pyrosil, Inc., 188 Front St., Cuyahoga Falls, Ohio  
Robertson Co., L. N., 1539 E. 103 St., Seattle 5, Wash.  
Smith-Gates Corp., Plainville, Conn.  
Stevens Mfg. Co., Inc., P. O. Annex 1007, Mansfield, Ohio  
ThermoRay Corp., South Buckhout St., Irvington-on-Hudson, N. Y.  
Ulanet Co., George, 413-13 Market St., Newark 5, N. J.  
United Electric Controls Co., 85 School St., Watertown 72, Mass.  
Wesix Electric Heater Co., 390 First St., San Francisco 5, Calif.  
Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.  
White-Rodgers Electric Co., 1209 Cass Ave., St. Louis 6, Mo.  
Wiegand Co., Edwin L., 7637 Thomas Blvd., Pittsburgh 8, Pa.

# THERMOSTATS, Misc.

Fire—see ALARMS, Fire, Automatic  
Furnace—see REGULATORS, Furnace Temperature  
Strip—see METAL, Thermostatic  
See also—RELAYS, Temperature; SWITCHES, Control, Automatic, Thermostat-Controlled

# THIMBLES, Wire Rope

Dosert Mfg. Corp., 249-255 Huron St., Brooklyn 22, N. Y.  
Electrical Mfg. Co., Box 217, Battle Creek, Mich.  
Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill.  
Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif.  
Kulka Electric Mfg. Co., Inc., 633 S. Fulton Ave., Mount Vernon, N. Y.

Laughlin Co., Tromas, 153 Fore St., Portland 6, Maine  
Macwhys Co., 2910 14th Ave., Kenosha, Wis.  
Ohio Brass Co., 380 N. Main St., Mansfield, Ohio  
Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa.  
Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa.  
Utilities Service Co., 1 Pine St., Allentown, Pa.

# THREAD, Running—See RUNNING-THREAD, Conduit

# THREADERS, Conduit

American Pipe Tool Co., 4856 W. Kinzie St., Chicago 44, Ill.  
Beaver Pipe Tools, Inc., 310 Dana Ave., N. E., Warren, Ohio  
Capewell Mfg. Co., 60-70 Governor St., Hartford 2, Conn.  
Erie Tool Works, 12th & Liberty Sts., Erie, Pa.  
Lawco, Inc., 217 W. 2nd St., Hutchinson, Kans.  
Nye Tool Co., 4120-30 Fullerton Ave., Chicago 32, Ill.  
● OSTER MFG. CO., 2046 E. 61 Pl., Cleveland 3, Ohio—ADV. PG. 138  
Quiljada Tool Div., Gaines-Collins Co., 5474 Alhambra Ave., Los Angeles 32, Calif.  
Reed Mfg. Co., 1456 W. 8th St., Erie, Pa.  
Ridge Tool Co., 400 Clark St., Elyria, Ohio  
Thread-Ezy Mfg. Co., Coruna, Mich.  
Toledo Pipe Threading Machine Co., 1445 Summit St., Toledo 4, Ohio  
Velocity Power Tool Co., 201 N. Braddock Ave., Pittsburgh 8, Pa.

# THREADERS, Conduit—see also STOCKS

# TIGHTENERS, Bolt—see BASES, Motor, Adjustable

# TIMERS

1. Appliances
2. Electronic
3. Indicating, Portable
4. Stop
5. Stop and Repeat Cycle
6. Switching, Portable
7. Welding

Abrams Instrument Corp., 606 E. Shawnee St., Lansing, Mich. (2, 4, 5)  
Aero Instrument Co., 11423 Vanowen St., North Hollywood, Calif. (3)  
Aitken-Reed Inc., 2802 Wollmer St., Manitowoc, Wis. (2, 4, 5)  
Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee 4, Wis., (2, 7)  
Ample Corp., 2037 W. Division St., Chicago 22, Ill. (1)  
Automatic Control Co., 995 University Ave., St. Paul 4, Minn. (4, 5)  
Automatic Controls Corp., 2390 Winewood, Ann Arbor, Mich. (1, 5, 6)  
Automatic Electric Mfg. Co., 10 State St., Mankato, Minn. (5)  
Automatic Temperature Control Co., Inc., 5212 Pulaski Ave., Phila. 44, Pa. (2, 4, 5, 7)  
Autotron Co., 128 W. Main St., Danville, Ill. (2)  
Barber-Colman Co., P. O. Drawer 99, 1300 Rock St., Rockford, Ill. (5)  
Basic Products Corp., 215-217 Lincoln Way West, Mishawaka, Ind. (1, 4, 5, 6)  
Bristol Co., Waterbury 20, Conn. (5)  
Bristol Motor Div., Vocaline Co. of America, Inc., Coulter St., Old Saybrook, Conn. (2)  
Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (2)  
Cramer Co., Inc., R. W., Main St., Centerbrook, Conn. (1, 3, 4, 5, 7)  
Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (2, 5)  
Dietz Co., Henry G., 12-16 Astoria Blvd., Long Island City 2, N. Y. (5)  
Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (2, 4, 5)  
Dimeo-Gray Co., 207 E. 6th St., Dayton 2, Ohio (3, 4, 6)  
Eliar Engineering Co., Inc., 750 S. 13 St., Newark 3, N. J. (2, 7)  
Electronic Control Corp., 1573 E. Forest Ave., Detroit 7, Mich. (2)  
Emmett Machine & Mfg., Inc., 445 E. Turkeyfoot Lake Rd., Akron 19, Ohio (5)  
Evsot Products Co., 2009 W. Carroll Ave., Chicago 12, Ill. (3, 5)  
Ferrara, Inc., 8106 W. Nine Mile Rd., Oak Park 37, Mich. (2, 5)  
Fisher-Pierce Co., Inc., 170 Pearl St., South Braintree, Mass. (2)  
General Control Co., 1200 Soldiers Field Rd., Boston 34, Mass. (2, 4, 5, 7)  
General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (2, 3, 4, 5, 6, 7)  
General Electric Co., Telechron Dept. Homer Ave., Ashland, Mass. (1)  
Globe Industries, Inc., 1784 Stanley Ave., Dayton 4, Ohio (2)  
Haydon Co., A. W., 232 N. Elm St., Waterbury, Conn. (3, 4, 5, 6)  
Hewlett-Packard Co., 395 Page Mill Rd., Palo Alto, Calif. (2)



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**For Skipping Operation on Selected Days—Series T566 "Skipper":** Skips operation automatically on weekends, holidays or any selected days . . . 1 to 12 on-off operations a day . . . timings from 1 to 23 hours . . . rated 35 amperes.

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**TIME-ALL:** Portable, plug-in time switch . . . control lights, radios, and other appliances . . . defrost refrigerators . . . timings from 1 to 23 hours . . . grey plaskon case, 1650 watts, 6 foot cord set.

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**CLOCK TIMER:** Combination electric clock and appliance timer . . . timings from 15 minutes to 5-1/2 hours . . . cord set and receptacle . . . spruce green plaskon case, 1650 watts.

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TIME-ALL

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Langevin Mfg. Corp., 37 W. 65 St., N. Y. 23, N. Y. (2)  
Machinery Electrification, Inc., Northboro, Mass. (2)  
Marion Electrical Instrument Co., 400 Canal St., Manchester, N. H. (2)  
Miller Harris Instrument Co., 601 E. Ogden Ave., Milwaukee 2, Wis. (4, 6)  
Modelectric Products Co., 1500 Bangs Ave., Asbury Park, N. J. (1, 2, 3, 4, 5, 6)  
National Time & Signal Corp., 21800 Wyoming Ave., Detroit 37, Mich. (4, 5, 7)  
Paragon Electric Co., 1600 - 12th St., Two Rivers, Wis. (1, 5)  
Partlow Corp., 2 Campion Rd., New Hartford, N. Y. (5)  
Peschel Electronics, Inc., 13 Garden St., New Rochelle, N. Y. (2)  
Photobell Co., 43 Vesey St., New York 7, N. Y. (2, 7)  
Post Machinery Co., Electronic Products Div., 140 Elliott St., Beverly, Mass. (2)  
Potter Instrument Co., Inc., 115 Cutter Mill Rd., Great Neck, L. I., N. Y. (2)  
Pyrosil, Inc., 1889 Front St., Cuyahoga Falls, Ohio (2)  
Quick Charge, Inc., 1750 N. E. 10th St., Oklahoma City 4, Okla. (1, 2)  
Ripley Co., Inc., Factory St., Middletown, Conn. (2, 4, 5, 7)  
Sangamo Electric Co., 11th & Converse, Springfield, Ill. (4)  
Seaboard Electric Co., 417 Canal St., New York 13, N. Y. (2, 5)  
Seely Instrument Co., Inc., 377 Fourth St. (P. O. Box 381), Niagara Falls, N. Y. (4, 5)  
Sherman Industrial Electronics Co., 505 Washington Ave., Belleville, N. J. (5)  
Square D Co., 6060 Rivard St., Detroit 11, Mich. (2, 7)  
Standard Electric Time Co., 129 Logan St., Springfield, Mass. (2, 3, 4)  
Sticht Co., Inc., Herman H., 27 Park Place, N. Y. 7, N. Y. (4)  
Stromberg Time Corp., 135 S. Main St., Thomaston, Conn. (5)  
Struthers-Dunn, Inc., Pittman, N. J. (5)  
Taylor-Winfield Corp., 1052 Mahoning Ave., Warren, Ohio (7)  
Tork Clock Co., Inc., 1 Grove St., Mt. Vernon, N. Y. (1, 6)  
Vemaline Products Co., P. O. Box 222, Hawthorne, N. J. (2, 5, 7)  
Walser Automatic Timer Corp., 420 Lexington Ave., New York 17, N. Y. (1, 6)  
Weltone Co., 19500 W. Eight Mile Rd., Detroit 19, Mich. (2, 7)  
Westclox Div., General Time Corp., LaSalle, Ill. (1, 3)  
Wiegand Co., Edwin L., 7637 Thomas Blvd., Pittsburgh 8, Pa. (5)  
Wilson & Co., G. C., 1950 - 8th Ave., Huntington, W. Va. (1, 2, 5, 7)  
Zenith Electric Co., 155 W. Walton St., Chicago 10, Ill. (4, 5)

### TIMERS, Misc.

**Coin-Operated—**see **SWITCHES, Control, Manual, Coin-Operated**  
**Interval—**see **TIMERS, Appliance; TIMERS, Stop**

**TIPS, Welding—**see **ELECTRODES, Welding**

### TONGS, Misc.

**Brazing—**see **TOOLS, Soldering and Brazing**  
**Chain Pipe—**see **WRENCHES, Pipe**  
**Fuse—**see **PULLERS, Fuse**  
**Test—**see **TESTERS, Circuit**

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2. Hand, Insulated
3. Live Line Safety
4. Powder Actuated
5. Pruning
6. Soldering and Brazing, Electric
7. Soldering and Brazing, Non-Electric
8. Splicing

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Aircraft Specialties, Inc., 415 Howard St., Lapeer, Mich. (2)  
Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa. (8)  
Anthony Co., F. M. 2022 Oakland Ave., Piedmont 11, Calif. (8)  
Barnard Co., Inc., B. S., 128 Lafayette St., New York 13, N. Y. (2, 8)  
Bartlett Mfg. Co., 3003 E. Grand Blvd., Detroit, Mich. (5)  
Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa. (2, 5)  
Billings & Spencer Co., 1 Laurel St., Hartford 1, Conn. (2)  
Black & Decker Mfg. Co., Towson 4, Md. (4)  
Blackhawk Mfg. Co., 5325 W. Rogers, Milwaukee 46, Wis. (6)  
Bodendick Tool Co., 325 E. Main St., Taylorville, Ill. (3, 5)  
Buck Electrical Mfg. Co., 139 Highland Parkway, Roselle, N. J. (8)  
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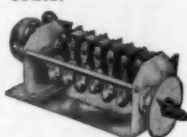


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Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (8)  
Kearney Corp., James R., 4236 Clayton Ave., St. Louis 10, Mo. (2, 3, 8)  
Klein & Sons, Mathias, 7200 McCormick Rd., Chicago 14, Ill. (8)  
Linde Air Products Co., 30 E. 42 St., N. Y. 17, N. Y. (7)  
Lint, Clyde W., 2323 W. 18 St., Chicago 8, Illinois (7)  
Luma Electric Equipment Co., 1607 Coaling Drive (P. O. Box 132), Toledo, Ohio (6)  
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P & C Hand Forged Tool Co., Box 5926, Milwaukee P. O., Portland 22, Ore. (2)  
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Powder Power Tool Corp., 7526 S. W. Macadam Ave., Portland 1, Ore. (4)  
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 Tac Imports, 14525 Bessemer St., Van Nuys, Calif. (3)  
 Thomas & Betts Co., Inc., 36 Butler St. Elizabeth, N. J. (8)  
 Triton Mfg. Co., Inc., East Haddam, Conn. (6)  
**● VELOCITY POWER TOOL CO.**, 201 N. Braddock Ave., Pittsburgh 8, Pa. (4, 7)—ADV. PG. 147  
 Vermaline Products Co., P. O. Box 222, Hawthorne, N. J. (6, 7)  
 Vulcan Electric Co., 88 Holten St., Danvers, Mass. (6)  
 Wall Mfg. Co., P. O. Box 71, Grove City, Pa. (6)  
 Weidenhoff, Inc., Joseph, Algona, Iowa (1)  
 Wen Products, Inc., 5808 Northwest Highway, Chicago 31, Ill. (6)

# TOOLS, Misc.

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 Commutator Grinding—see STONES, Commutator  
 Conduit—see MANDRELS; PICKUPS, Conduit  
 Tool; REAMERS; RODS, Conduit;  
 STOCKS; TAPES, Steel  
 Stud Welding—see WELDERS, Stud  
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 Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa. (1, 2)  
 Bernz Co., Inc., Otto, 280 Lyell Ave., Rochester 6, N. Y. (2, 3)  
 Cope, Inc., T. J., 711 S. 50 St., Phila. 43, Pa. (2)  
 Dockson Corp., 3839 Wabash Ave., Detroit 8, Mich. (3)  
 Hauck Mfg. Co., 124-136 - 10th St., Brooklyn 15, N. Y. (2, 3)  
 Insta-Gas Corp., 1977 E. Woodbridge St., Detroit 7, Mich. (3)  
 Klein & Sons, Mathias, 7200 McCormick Rd., Chicago 14, Ill. (1)  
 Lenk Mfg. Co., 30 Cummington St., Boston 15, Mass. (1, 2, 3)  
 Linde Air Products Co., 30 E. 42 St., N. Y. 17, N. Y. (3)  
 Prope Corp., Edgerton, Wis. (3)  
 Pressure Can Corp., P. O. Box 107, Edgerton, Wis. (3)  
 Turner Brass Works, 821 Park Ave., Sycamore, Ill. (1, 2)  
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**TORCHERS—See LAMPS (FIXTURES); FIXTURES, Lighting, Ornamental, Interior**

**TOTALIZERS, Station Load—see RECORDERS, Load Totalizing**

**TOUCHPLATES—see PLATES, Touch**

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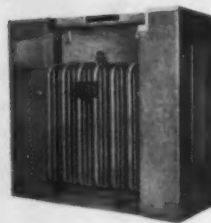
Beaver-Advance Corp., 12th & Factory Sts., Ellwood City, Pa. (1)  
 Holan Corp., J. H., 4100 W. 150 St., Cleveland 11, Ohio (2)  
 Leibfried Mfg. Corp., C. H., 95-101 Guernsey St., Brooklyn 22, N. Y. (1, 2)  
 Maxwell Equipment Co., Ford St., Milford, Conn. (2)  
 McCabe-Powers Auto Body Co., 5900 N. Broadway, St. Louis 15, Mo. (2)  
 Millerbernd Mfg. Co., Winsted, Minn. (1)  
 Mobile Aerial Towers, Inc., 1405 N. Clinton St., Fort Wayne, Ind. (2)  
 Philco Corp., Tiesga & C Sts., Phila. 34, Pennsylvania (1)  
 Rostan Corp., 5660 59th St., Maspeth 78, L. I., N. Y. (1)  
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 Kearney Corp., James R., 4236 Clayton Ave., St. Louis 10, Mo. (2)

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 Utilities Service Co., 1 Pine St., Allentown, Pa.

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5. Constant Voltage
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8. Instrument
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12. Mercury Vapor Lamp
13. Oil Burner
14. Radio, Sound, Etc.
15. Signalling
16. Testing
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18. Welding

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 Acme Electric Corp., 96 Water St., Cuba, N. Y. (1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 18)  
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 Auth Electric Co., Inc., 34-20 45th St., L. I. C. 1, N. Y. (1, 15)  
 Berkshire Transformer Corp., 15 South Ave., New Milford, Conn. (1, 2, 4, 5, 6, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18)  
 Biddle Co., James G., 1316 Arch St., Phila. 7, Pa. (16)  
 Birdsell Mfg. Co., Inc., 750 San Antonio Rd., Palo Alto, Calif. (4, 5, 7, 9, 10, 11, 18)  
 Bogen Co., Inc., David, 29 Ninth Ave., N. Y. 14, N. Y. (14)  
 Brown Boveri Corp., 19 Rector St., N. Y. 6, N. Y. (8)  
 Bryant Electric Co., Box D Barnum Station, Bridgeport 2, Conn. (10)  
 Cable Electric Products, Inc., 234 Daboll St., Providence 7, R. I. (1, 4, 5, 10, 15)  
 Carson Mfg. Co., Inc., 1804 E. 30 St., Indianapolis 18, Ind. (1, 2, 9, 10, 14)  
 Chicago Standard Transformer Corp., Addison & Elston, Chicago 10, Ill. (2, 6, 9, 10, 14, 15)  
 Coil Co. of America, Inc., 8 Washington St., Northvale, N. J. (1, 2, 3, 4, 5, 6, 9, 10, 11, 14, 15, 16, 17, 18)  
 Control Systems Inc., 1788 Stillwell Ave., Brooklyn 23, N. Y. (2)  
 Crittenden Transformer Works, 1220 Madeau St., Los Angeles 1, Calif. (14)  
 Crown Controls Co., Inc., 40-44 S. Washington St., New Bremen, Ohio (1, 10)  
 Dongan Electric Mfg. Co., 2987-3001 Franklin St., Detroit 7, Mich. (7, 11, 13, 15)  
 Eastern Specialty Co., 3617 N. 8th St., Phila. 40, Pa. (16)  
 Edwards Co., Inc., Norwalk, Conn. (1, 10, 15)  
 Elster Engineering Co., Inc., 750 S. 13 St., Newark 3, N. J. (2, 9, 10, 11, 16, 18)  
 A. G. A. Div., Elastic Stop Nut Corp. of America, Elizabeth, N. J. (17)  
 Electrical Facilities, Inc., 4224 Holden St., Oakland 8, Calif. (6, 9, 16)  
 Electrical Windings, Inc., 2015 N. Kolmar Ave., Chicago 39, Ill. (2, 6, 8, 9, 10, 11, 14, 15, 16)  
 Ericson Mfg. Co., 5209 Euclid Ave., P. O. Box 1401, Cleveland 3, Ohio (10)  
 Erie Electric Co., Inc., 120 Church St., Buffalo 2, N. Y. (2, 9, 10)  
 Esterline-Angus Co., Inc., P. O. Box 596, Indianapolis 6, Ind. (8)  
 Federal Pacific Electric Co., 50 Paris St., Newark 5, N. J. (7)  
 Federal Telephone and Radio Co., 100 Kingsland Rd., Clifton, N. J. (6, 8, 9, 10, 11, 14, 15, 16, 17)  
 Ferranti Electric, Inc., 30 Rockefeller Plaza, N. Y. 20, N. Y. (1, 6, 9, 10, 14, 15, 17)  
 France Mfg. Co., 10325 Beres Rd., Cleveland 2, Ohio (7, 9, 13)  
 Freed Transformer Co., Inc., 1718 Weirfield St., Brooklyn 27, N. Y. (6, 8, 9, 10, 12, 14, 15, 16, 17, 18)  
 Gardner Electric Mfg. Co., 4227 Nellie St., Emeryville 8, Calif. (2, 7, 12, 13)  
 General Controls Co., 801 Allen Ave., Glendale, Calif. (5, 10)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18)  
 General Electric Co., Wiring Dept., 95 Hawthaway St., Providence 7, R. I. (1, 10)  
 General Nuclear Corp., 550 Fifth Ave., New York 27, N. Y. (9, 10, 11)  
 Goslin Electric & Mfg. Co., 2921 W. Oliver St., Burbank, Calif. (2, 4, 5, 6, 8, 9, 10)  
 Hevi Duty Electric Co., 4212 W. Highland Blvd., Milwaukee, Wis. (2, 4, 6, 9, 10, 11, 16)  
 Hi-Spec Mfg. Co., Inc., 413 Market St., Newark 5, N. J. (1, 15)  
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 Hobart Bros., Hobart Square, Troy 1, Ohio (18)  
 Industrial Transformer Corp., Goukdsboro, Pa. (2, 6, 8, 9, 10, 14, 15, 16)  
 Jefferson Electric Co., 25th & Madison, Ballwood, Ill. (1, 3, 5, 6, 7, 10, 11, 12, 13, 14, 15)  
 Jerrold Electronics Corp., 26th & Dickinson Sts., Phila. 46, Pa. (14)  
 Koltan Electric Mfg. Co., 123 New Jersey Railroad Ave., Newark 5, N. J. (2, 9)  
 Kuhlman Electric Co., 1000 26th St., Bay City, Mich. (5, 8, 12)  
 Langevin Mfg. Corp., 37 W. 65 St., N. Y. 23, N. Y. (1, 2, 4, 5, 6, 8, 9, 10, 14, 15, 16, 17, 18)  
 Lee Electric, Inc., 132 Beckwith Ave., Paterson, N. J. (1, 2, 5, 8, 9, 10, 11, 12, 15, 17, 18)  
 Levitan Mfg. Co., Inc., 236 Greenpoint Ave., Brooklyn 22, N. Y. (1)  
 Liberty Bell Mfg. Co., Inc., Short St., Minerva, Ohio (1)  
 Lincoln Electric Co., 22801 St. Clair Ave., Cleveland 17, Ohio (18)  
 Lindberg Engineering Co., 2450 W. Hubbard St., Chicago 12, Ill. (4, 6)  
 Line Material Co., 700 West Michigan St., Milwaukee, Wis. (4, 5)  
 Magnatran, Inc., 248 Schuyler Ave., Kearny, N. J. (6, 9, 16, 18)  
 Marcus Transformer Co., Inc., Leesville Ave., Rahway, N. J. (2, 18)  
 McCarthy Electric Co., 2112-36 E. Woodbridge St., Detroit 7, Mich. (18)

- Midwest Electric Products, Inc., 1515 N. Front St., Mankato, Minn. (8, 10, 15)
- **MOLONEY ELECTRIC CO.**, 5390 Birchler Blvd., St. Louis 20, Mo. (4, 5, 6, 10, 18)—ADV. PG. 121
- Multi-Amp Corp., 10 Third St., Newark 7, N. J. (6, 9, 10, 11, 14, 16, 18)
- National Electric Welding Machines Co., 1846-1916 N. Trumbull St., Bay City, Mich. (18)
- Northeller Winding Labs., Inc., 120 Albermarle Ave., Trenton 3, N. J. (2, 6, 8, 9, 10, 11, 12, 16, 18)
- NuTone, Inc., Madison & Red Bank Roads, Cincinnati 27, Ohio (1, 10)
- Partrick & Wilkins Co., 51 N. Seventh St., Phila. 6, Pa. (15)
- Perkin Engineering Corp., 345 Kansas St., El Segundo, California (4, 5, 10, 11, 14, 17, 18)
- **PRECISION TRANSFORMER CORP.**, 660 W. Grand Ave., Chicago 10, Ill. (18)—ADV. PG. 140
- Precision Welder Mfg. Co., 660 W. Grand Ave., Chicago 10, Ill. (18)
- Quick Charge, Inc., 1750 N. E. 10th St., Oklahoma City 4, Okla. (5, 18)
- R T & E Co., 1900 E. North St., Waukesha, Wis. (4, 5)
- Rapid Electric Co., 2881 Middletown Rd., Bronx 61, N. Y. (10)
- Raytheon Mfg. Co., Equipment Marketing Div., 100 River St., Waltham 54, Mass. (2, 3, 4, 5, 6, 7, 8, 9, 10, 18)
- Rex Welder & Engineering Co., 409 S. West Blvd., Kansas City 8, Mo. (10, 18)
- Rittenhouse Co., Inc., East St., Honeoye Falls, N. Y. (1, 8, 10, 15)
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- SNC Mfg. Co., Inc., P. O. Box 277, Oshkosh, Wis. (2, 4, 5, 6, 8, 9, 10, 14, 15, 16, 17, 18)
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- Sorensen & Co. Inc., 375 Fairfield Ave., Stamford, Conn. (5)
- **SORREL ELECTRIC CO.**, 838 W. National Ave., Milwaukee 4, Wis. (2, 9, 10, 15, 16, 17, 18)—ADV. PG. 126-127
- Square D Co., 6060 Rivard St., Detroit 11, Mich. (11)
- Standard Electronic Corp., 285 Emmet St., Newark 5, N. J. (4, 6, 9, 16, 18)
- **STANDARD TRANSFORMER CO.**, 140 Dana St., N. E. Warren, Ohio (8, 10)—ADV. PG. 145
- Sterling Transformer Corp., 297 N. 7th St., Brooklyn, N. Y. (6, 8, 9, 10, 14, 15)
- Swedish Iron & Steel Corp., 100 Quimby St., Westfield, N. J. (3)
- Taylor-Winfield Corp., 1052 Mahoning Ave., Warren, Ohio (18)
- Thermador Electrical Mfg. Co., 5119 District Blvd., Los Angeles 22, Calif. (2, 6, 8, 9, 10, 11, 14, 15, 16, 18)
- Thordarson-Meissner Mfg. Div., Maguire Industries, Inc., Seventh & Belmont Sts., Mt. Carmel, Ill. (6, 8, 10, 14, 15)
- Todd Products Co., Inc., 156 Gramatan Ave., Mount Vernon, N. Y. (1, 2, 4, 5, 6, 14, 16)
- Touch-Plate Mfg. Corp., 16530 Garfield, Paramount, Calif. (10)
- Transformers, Inc., 532 North St., Endicott, N. Y. (14)
- Trindl Products, Ltd., 1807-11 S. Clark St., Chicago 16, Ill. (18)
- Trine Mfg. Corp., 1430 Ferris Place, New York 61, N. Y. (1)
- United States Electronics Corp., 275 Warren St., Lyndhurst, N. J. (1, 2, 6, 8, 9, 10, 11, 13, 14, 15, 17)
- United Transformer Co., 150 Varick St., New York 13, N. Y. (9, 10, 14, 15, 16)
- Uptegraff Mfg. Co., R. E., P. O. Box 182, Scottdale, Pa. (2, 5, 8, 9, 10, 16)
- Varo Mfg. Co., Inc., 1801 Walnut St., Garland, Tex. (6)
- Wagner Electric Corp., 6400 Plymouth Ave., St. Louis 14, Mo. (8)
- Western Electro-Mechanical Co., Inc., 300 Broadway, Oakland 7, Calif. (16)
- Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (4, 5, 6, 8, 10, 11, 15, 17)
- Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark 5, N. J. (8, 16)
- Wheeler Insulated Wire Co., 150 E. Aurora St., Waterbury 20, Conn. (10, 11, 15)
- Woodhead Co., Daniel, 15 N. Jefferson St., Chicago 6, Ill. (17)

**TRANSFORMERS (Classified as to Design)**

1. Air-Cooled, Dry Type, Over 600 Volts
2. Air-Cooled, Dry Type, Under 600 Volts
3. Auto
4. Liquid-Cooled
5. Radiator-Cooled
6. Radiator and Fan-Cooled
7. Tank-Cooled

- Accurate Engineering Co., 2005 Blue Island Ave., Chicago 8, Ill. (2, 3)
- Acme Electric Corp., 36 Water St., Cuba, N. Y. (1, 2, 3, 4, 5, 6, 7)
- Allis-Chalmers Mfg. Co., 930 S. 70th St., Milwaukee 1, Wis. (1, 2, 4, 5, 6, 7)
- Atlantic Transformer Co., 661 N. 12th St., Phila., Pa. (1, 2, 7)
- Atlantic Transformer Div., New London Instrument Co., Inc., 30 Hynes Ave., Groton, Conn. (1, 2, 3)

**LIGHT WEIGHT**

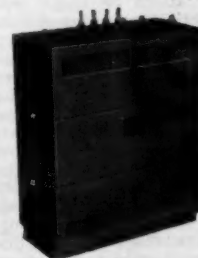
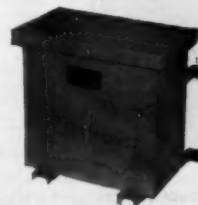


**A new Uptegraff  
DRY TYPE  
Transformer**

This new dry type Uptegraff Transformer (Type EW) is light in weight due to the use of silicon insulation materials. In addition, these provide exceptionally high overload capacity and long life. Fully guaranteed by Uptegraff, it is a high-quality, practical transformer that can be used wherever safety and dependability are required.

Other Uptegraff Dry Type Transformers are made in sizes up to 3750 KVA—15 KV for Power and Distribution Services, in both ventilated and enclosed types, using Class B or H insulation.

Specialty Transformers, air-cooled and compound-filled, in standard and special types, can meet a wide variety of services and are easily adapted to your special requirements.



**R. E. Uptegraff Manufacturing Co.**  
Scottdale, Pennsylvania

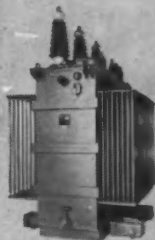


# NIAGARA Quality Built TRANSFORMERS

Niagara Dry —  
Dry-type self-  
cooled Trans-  
formers



Niagara Oil —  
immersed self-  
cooled 500 KVA  
Transformer



Niagara 2500  
KVA Power  
Transformer

Our reputation for reliability and performance has earned us a long list of friends over the years. Strange as it may seem, delivery promises are commitments that we take seriously!

In addition to that, we think there is a much more important reason why ERIE is gaining every year. We think an awful lot of it has to do with the ATTITUDE of the people that actually build NIAGARA TRANSFORMERS. Our crew is peculiar, we'll admit, but they just won't let a shoddy piece of workmanship get by. That's rare these days and it means a real plus value for you. Discover this truth for yourself! Let us quote on your next transformer.

**ERIE ELECTRIC CO. INC., 343 BIRDSALL ST., BUFFALO 2, N. Y.**

OFFICES IN PRINCIPAL CITIES

POWER • LIGHTING • LOAD CENTER • OIL IMMERSSED • DISTRIBUTION • UNIT SUBSTATION • DRY-AIR COOLED • NON-INFLAMMABLE

## Dry-type Transformers



G-E dry-type transformers have a wide range of applications on single- and three-phase lighting and power circuits throughout industry. These compact, lightweight units are available in two designs. Type M transformers, rated 0.25 through 15 kva, are suitable for indoor and outdoor use. Type D transformers, rated 25 kva and above, are for indoor use only. All G-E dry-types can be easily installed on wall brackets, columns, or platforms. Solderless connectors on the higher ratings do away with splicing, soldering, and taping. G.E. also has available a complete line of dry-type distribution transformers for primary circuits of 2400 to 14,400 volts, in sizes 3-500 kva inclusive.

Consult classified section of phone book for address of nearest G-E Apparatus Agent-Distributor, or write direct to General Electric Co., Section 640-358, Schenectady 5, N. Y.

**GENERAL ELECTRIC**

Berkshire Transformer Corp., 15 South Ave., New Milford, Conn. (1, 2, 3)  
Birdsell Mfg. Co., Inc., 750 San Antonio Rd., Palo Alto, Calif. (1, 2, 3)  
Brown Boveri Corp., 19 Rector St., N. Y. 6, N. Y. (1, 4, 5)  
Brush Abee, Inc., 60-07 39th Ave., Woodside 77, Long Island, N. Y. (1, 2, 3, 4, 5, 6, 7)  
Carson Mfg. Co., Inc., 1804 E. 30 St., Indianapolis 18, Ind. (2, 3)  
Central Transformer Corp., P. O. Box 687, Pine Bluff, Ark. (1, 2, 3, 4, 5, 6, 7)  
Chicago Standard Transformer Corp., Addison & Elston, Chicago 18, Ill. (2, 3)  
Clark Electronic Corp., Pioneer Rd. Box 165, Palm Springs, Calif. (1, 2, 4)  
Coil Co. of America, Inc., 8 Washington St., Northvale, N. J. (1, 2, 3, 4)  
Crittenden Transformer Works, 1220 Nadeau St., Los Angeles 1, Calif. (2, 3)  
Crown Controls Co., Inc., 40-44 S. Washington St., New Bremen, Ohio (2)  
Dongan Electric Mfg. Co., 2987-3001 Franklin St., Detroit 7, Mich. (2, 3)  
Eisler Engineering Co., Inc., 750 S. 13 St., Newark 3, N. J. (1, 2, 3, 4)  
Electrical Windings, Inc., 2015 N. Kolmar Ave., Chicago 39, Ill. (1, 2)  
Erie Electric Co., 120 Church St., Buffalo 2, N. Y. (1, 2, 3, 4, 5, 6, 7)  
Federal Pacific Electric Co., 50 Paris St., Newark 5, N. J. (1, 2, 3, 4, 5, 7)  
Federal Telephone and Radio Co., 100 Kingsland Rd., Clifton, N. J. (3, 4)  
Farrant Electric, Inc., 30 Rockefeller Plaza, N. Y. 20, N. Y. (1, 2, 3, 4, 5, 6, 7)  
Freed Transformer Co., Inc., 1718 Weirfield St., Brooklyn 27, N. Y. (1, 2, 3, 4)  
Gardner Electric Mfg. Co., 4227 Hollis St., Emeryville 8, Calif. (1, 2, 3, 4, 5, 7)  
General Electric Co. Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 3, 4, 5, 6, 7)  
General Nuclear Corp., 550 Fifth Ave., New York 27, N. Y. (2, 3)  
General Radio Co., 275 Massachusetts Ave., Cambridge 39, Mass. (3)  
Goslin Electric & Mfg. Co., 2921 W. Olive St., Burbank, Calif. (3, 4)

● **GRAYBAR ELECTRIC CO. INC.**, 420 Lexington Ave., N. Y. 17, N. Y. (1)—ADV. PG. 2  
Hevi Duty Electric Co., 4212 W. Highland Blvd., Milwaukee, Wis. (1, 2, 3)  
Hindle Transformer Co., Inc., Woods Church Rd., Flemington, N. J. (1, 2, 3)  
Hollingsworth, John R., Nutt & French Creek Rds., Phoenixville, Pa. (1, 2, 3, 4, 5, 6, 7)  
● **I. T. E. CIRCUIT BREAKER CO.**, 19th & Hamilton Sts., Phila. 30, Pa. (1, 2, 4, 5, 6, 7)—ADV. PG. 128

Industrial Transformer Corp., Gouldsboro, Pa. (1, 2, 3)  
Jefferson Electric Co., 25th & Madison, Bellwood, Ill. (1, 2, 3)  
Jeffries Transformer Co., 1710 E. 57 St., Los Angeles 58, Calif. (1, 2, 3)  
Kaltan Electric Mfg. Co., 123 New Jersey Railroad Ave., Newark 5, N. J. (1, 2, 3, 4)  
Kuhman Electric Co., 1000 26th St., Bay City, Mich. (1, 2, 3, 4, 5, 6, 7)  
Langevin Mfg. Corp., 37 W. 65 St., N. Y. 23, N. Y. (1, 2, 3, 4, 5)  
Lee Electric, Inc., 132 Beckwith Ave., Paterson, N. J. (1, 2, 3)  
Line Material Co., 700 West Michigan St., Milwaukee, Wis. (2, 4)  
Magnatran, Inc., 248 Schuyler Ave., Kearny, N. J. (1, 2, 3, 4, 5, 6, 7)  
Magnavox Co., Fort Wayne 4, Ind. (2, 3)  
Marcus Transformer Co., Inc., Leesville Ave., Rahway, N. J. (1, 2, 3, 4, 5, 6)  
McCarthy Electric Co., 2112-16 E. Woodbridge St., Detroit 7, Mich. (3, 4)  
● **MOLONEY ELECTRIC CO.**, 5390 Bircher Blvd., St. Louis 20, Mo. (1, 2, 3, 4, 5, 6, 7)—ADV. PG. 121  
Multi-Amp Corp., 10 Third St., Newark 7, N. J. (1, 2, 3, 4, 7)  
Murphy Elevator Co., Inc., 128 E. Main St., Louisville 2, Ky. (1, 2, 3)  
Pennsylvania Transformer Co., Box 330, Cannonsburg, Pa. (1, 3, 4, 5, 6, 7)  
Permy Equipment Co., 893 Chambers Rd. (Station A, Box 153), Columbus, Ohio (3)  
Philco Corp., Tioga & C Sts., Philadelphia 34, Pennsylvania (3)  
Nothelfer Winding Labs, Inc., 120 Albermarle Ave., Trenton 3, N. J. (1, 2, 3)  
Perkin Engineering Corp., 345 Kansas St., El Segundo, Calif. (1, 2, 3)  
● **PRECISION TRANSFORMER CORP.**, 660 W. Grand Ave., Chicago 10, Ill. (1, 2)—ADV. PG. 140  
Quick Charge, Inc., 1750 N. E. 10th St., Oklahoma City 4, Okla. (2)  
R T & E Co., 1900 E. North St., Waukesha, Wis. (3, 4, 5)  
Rapid Electric Co., 2861 Middletown Rd., Bronx 61, N. Y. (2, 3)  
Raytheon Mfg. Co., Equipment Marketing Div., 100 River St., Waltham 54, Mass. (1, 2, 3, 4)  
Rex Welder & Engineering Co., 409 S. West Blvd., Kansas City 8, Mo. (3, 4)  
Richardson-Allen Corp., 116-15 Fifteenth Ave., College Point, L. I., N. Y. (2, 3)  
SBC Mfg. Co., Inc., P. O. Box 277, Oshkosh, Wis. (1, 2, 3)  
Sola Electric Co., 4633 W. 16th St., Chicago 50, Ill. (2)  
● **SORREL ELECTRIC CO.**, 838 W. National Ave., Milwaukee 4, Wis. (1, 2, 3, 4, 5, 6, 7)—ADV. PG. 126-127

for changing  
load  
demands



your best choice

**Wagner**

## DRY-TYPE TRANSFORMERS

**SAFE**—Wagner dry-type transformers meet all requirements for indoor installations. It is unnecessary to use fire-proof vaults or other special protection—even when fire hazards are present.

**ECONOMICAL**—Reduce installation costs—line losses. Eliminate long runs of secondary copper. You have no maintenance problems.

**COMPACT**—Small in size, light in weight. Easy to install and easy to move when you make changes in plant facilities.

Ratings . . .

Single-Phase . . . 1 to 100 kva.

Three-Phase . . . 3 to 300 kva.

600 volts and below.

**Wagner Electric Corporation**  
6413 Plymouth Avenue, St. Louis 14, Mo., U. S. A.

Standard Electronic Corp., 285 Emmet St., Newark 5, N. J. (1, 2, 3, 4, 7)  
**STANDARD TRANSFORMER CO.**, 140 Dana St., N. E. Warren, Ohio (1, 2, 3, 4, 5, 6, 7)—ADV. PG. 145  
 Sterling Transformer Corp., 297 N. 7th St., Brooklyn, N. Y. (1, 2, 3)  
 Stockwell Transformer Co. of Ohio, 884 W. Waterloo Rd., Akron 19, Ohio (1, 2, 3, 4, 5, 6, 7)  
 Telectro Industries Corp., 35-16 37th St., Long Island City 1, N. Y. (3)  
 Thermador Electrical Mfg. Co., 5119 District Blvd., Los Angeles 22, Calif. (1, 2, 3)  
 United States Electronics Corp., 275 Warren St., Lyndhurst, N. J. (1, 2, 3, 4, 5)  
 United Transformer Co., 150 Varick St., New York 13, N. Y. (3)  
 Uptegraff Manufacturing Co., R. E., P. O. Box 182, Scottsdale, Pennsylvania (1, 2, 3, 4, 5, 6, 7)  
 Wagner Electric Corp., 6400 Plymouth Ave., St. Louis 14, Mo. (1, 2, 3, 4, 5, 6, 7)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1, 2, 3, 4, 5, 6, 7)  
**WESTINGHOUSE ELECTRIC SUPPLY CO.**, 40 Wall St., New York 5, N. Y. (1, 2, 4)—ADV. PG. SECOND COVER  
 Wheeler Insulated Wire Co., 150 E. Aurora St., Waterbury 20, Conn. (2)

**TRANSFORMERS—see also BALLASTS**

**TRANSMISSIONS, Variable Speed**

American Blower Corporation, Detroit 32, Michigan  
 American Pulley Co., 4200 Wissahickon Ave., Phila. 29, Pa.  
 Equipment Engineering Co., 2853 Columbus Ave., Minneapolis 7, Minn.  
 Fairchild Engine & Airplane Corp., Speed Control Div., 90 Riberia St., St. Augustine, Fla.  
 Graham Transmissions Inc., Menomonee Falls, Wis.  
 Lima Electric Motor Co., Findlay Road, Lima, Ohio  
 Link-Belt Co., 307 N. Michigan Ave., Chicago 1, Ill.  
 Lovejoy Flexible Coupling Co., 4963 W. Lake St., Chicago 44, Ill.  
 Morse Chain Co., Borg Warner Corp., Ithaca, N. Y.  
 Reeves Pulley Co., Inc., 1225 7th St., Columbus, Ind.  
 Standard Transmission Equipment Co., 70 W. Union St., Pasadena 1, Calif.  
 Sterling Electric Motors, Inc., 5401 Telegraph Rd., Los Angeles 22, Calif.  
 U. S. Electrical Motors, Inc., 200 E. Slauson Ave., Los Angeles, Calif.  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.  
 Worthington Corp., Worthington Ave., Harrison, N. J.

**TRENCHES**

Charles Machine Works, Box 66, Perry, Okla.  
 Gar Wood Industries Inc., Wayne, Mich.

**TRAYS, Cable—see WIREWAYS**  
**TREADS, Floor—see BUTTONS, Push, Floor; SWITCHES, Control, Manual, Foot, Door Mat**

**TRIMMERS, Tree, Hedge and Brush**

Bartlett Mfg. Co., 3003 E. Grand Blvd., Detroit 2, Mich.  
 Bodendieck Tool Co., 325 E. Main St., Taylorville, Ill.  
 Britten & Co., Inc., E. F., 22 S. Ave., Cranford, N. J.  
 Brushmaster Saw, Inc., 84 Emerald St., Keene, N. H.  
 Chance Co., A. B., 210 N. Allen St., Centralia, Mo.  
 Kaufman Mfg. Co., 29th & Meadow Lane, Manitowoc, Wis.  
 Kearney Corp., James R., 4236 Clayton Ave., St. Louis 10, Mo.  
 Skil Corp., 5033 Elston Avenue, Chicago 30, Illinois  
 Stanley Electric Tools, 436 Myrtle St., New Britain, Conn.

**TROLLEY BUSWAYS—see BUSWAYS, Trolley**

**TROLLEYS, Crane and Hoist**

Chester Hoist Div., National Screw & Mfg. Co., Lisbon, Ohio  
 Chisholm-Moore Hoist Div., Columbus McKinnon Chain Corp., 6072 Fremont Ave., Tonawanda, N. Y.  
 Cleveland Crane & Engineering Co., Wickliffe, Ohio  
 Coffing Hoist Co., 800 Walter St., Danville, Ill.  
 Feedrail Corp., 125 Barclay St., New York 7, N. Y.  
 Gillespie Co., Robert, Pine Street, Ware, Mass.  
 Manning, Maxwell & Moore, Inc., Shaw-Box Crane & Hoist Div., Muskegon, Mich.  
 Reading Crane & Hoist Corp., 2100 Adams St., Reading, Pa.  
 Round & Son, Inc., David, Box 883, Cleveland 22, Ohio  
 Sherman & Reilly, Inc., 1 Broad St., Chattanooga 2, Tenn.  
 Silent Hoist & Crane Co., 841 - 63rd St., Brooklyn, 20, N. Y.

**TROUGH, Cable**

**COPE, INC.**, T. J., 711 S. 50 St., Phila. 43, Pa.—ADV. PG. 112-113  
 Delta-Star Electric Div., H. K. Porter Co., Inc., 2437 Fulton St., Chicago 12, Ill.  
 Globe Co., 4000 S. Princeton Ave., Chicago 9, Ill.



**for every purpose**

**1/4 Kva to 1500 Kva  
single phase  
1 Kva to 3000 Kva  
3-phase**

**To operate 120 volt lighting and portable equipment from 240, 480, or 600 volt power circuits.**

**To operate special equipment on standard circuits.**

**To change odd voltages to standard voltages, and phase changing.**

**For high voltage interior distribution systems, such as 2400, 4160, 4800, 7200, 13,200, and up to 15,000 volts.**

Also

**Special Transformers and Saturable Reactors**

**Substations**

**For interior high voltage distribution systems, with either dry-type or Askarel-cooled transformers, and primary and secondary switchgear.**

**100 to 3000 Kva and up to 15,000 volts.**

**More Information on pages 126 and 127**

**Sales Engineers in Principal Cities**  
**SORGEL ELECTRIC CO.**  
 838b W. National Ave. Milwaukee 4, Wis.

Husky Products, Inc., 5300 Vine St., Cincinnati 17, Ohio  
 Queen Products Co., Inc., Thirteenth & Roman Sts., Louisville 3, Ky.  
 Royal Switchboard Co., Inc., 460 Driggs Ave., Brooklyn 11, N. Y.  
 Sun Electric Products, Inc., 28 S. Day St., Orange, N. J.  
 Versabar Corp., 517 Communipaw Ave., Jersey City 6, N. J.  
 Wadsworth Electric Mfg. Co., Inc., 20-34 W. 11th St. (Box 272), Covington, Ky.

**TROUGH, Meter—see BOXES, Meter, Service**

**TRUCKS**

1. **Appliance**
2. **Line**
3. **Materials Handling**
4. **Service**

American Pulley Co., 4200 Wissahickon Ave., Phila. 29, Pa. (1, 3)  
 Automatic Transportation Co., 101 W. 87th St., Chicago 20, Ill. (3)  
 Barrett-Cravens Co., 630 Dundee Rd., Northbrook, Ill. (3)  
 Bernard-Franklin Co., Inc., Hedley & Balfour Sts., Phila. 37, Pa. (1, 3)  
 Buda Co., 145 & Commercial Ave., Harvey, Ill. (3)  
 Clark Co., George P., 56 Canal St., Windsor Locks, Conn. (3)  
 Clark Equipment Co., Industrial Truck Div., 24th St., Battle Creek, Mich. (3)  
 Elkay Products Co., 323-27 W. 16 St., New York 11, N. Y. (1, 3)  
 Elwell-Parker Electric Co., 4319 St. Clair Ave., Cleveland 3, Ohio (3)  
 Erickson Power Lift Trucks, Inc., St. Anthony Blvd. & University Ave., N. E., Minneapolis 18, Minn. (3)  
 Fairbanks Co., 393 Lafayette St., New York 3, N. Y. (1, 3)  
 Four Wheel Drive Auto Co., 105 E. 12 St., Clintonville, Wis. (2)  
 Gillespie Co., Robert, Pine Street, Ware, Mass. (3)  
 Hamilton Caster & Mfg. Co., 1519 Dixie Highway, Hamilton, Ohio (1, 3)  
 Hyster Co., 2902 N. E. Clackamas St., Portland 8, Ore. (3)  
 Ironbound Box & Lumber Co., 42 Hoffman Place, Hillside, N. J. (3)  
 Kearney Corp., James R., 4236 Clayton Ave., St. Louis 10, Mo. (4)  
 Leebaw Mfg. Co., 65 Wayne Ave., Youngstown 2, Ohio (3)  
 Lewis-Shepard Products, Inc., 125 Walnut St., Watertown, Mass. (3)  
 Lift Trucks, Inc., 2425 Spring Grove Ave., Cincinnati 14, Ohio (3)  
 McCabe-Powers Auto Body Co., 5900 N. Broadway, St. Louis 15, Mo. (2, 4)  
 Mercury Mfg. Co., 4044 S. Halstead St., Chicago 9, Ill. (3)  
 Moto-Truc Co., 1953 E. 59 St., Cleveland 3, Ohio (3)  
 Nutting Truck and Caster Co., 1201 W. Division St., Faribault, Minn. (1, 3)  
 Orangeville Mfg. Co., Orangeville, Pa. (1, 3)  
 Revolver Co., 86th St. & Tonelle Ave., Route 1 & 9, North Bergen, N. J. (3)  
 Rol-Away Truck Mfg. Co., Inc., 6143 S. E. Foster Rd., Portland 6, Ore. (3)  
 Self-Lifting Plano Truck Co., 423 N. Main St., Findlay, Ohio (1)  
 Silent Hoist & Crane Co., 841 - 63rd St., Brooklyn 20, N. Y. (3)  
 Spaulding Fibre Co., Inc., 310 Wheeler St., Tonawanda, N. Y. (3)  
 Stevens Appliance Truck Co., Norton Rd. (P. O. Box 897), Augusta, Ga. (1, 3)  
 Wellington Machine Co., 133 De Wolf St., Wellington, Ohio (3)  
 West Bend Equipment Corp., 16 Water St., West Bend, Wis. (3)  
 Wilder Mfg. Co., Inc., Mechanic St. & Erie Railroad, Port Jervis, N. Y. (3)  
 Yale Materials Handling Div., Yale & Towne Mfg. Co., Roosevelt Blvd. at Halderman Ave., Phila. 15, Pa. (3)  
 Yeats Appliance Dolly Sales Co., 2124 N. 12th St., Milwaukee 5, Wis. (1)

**TUBES, Electronic**

1. **Gas-Filled**
2. **Vacuum**

Accurate Engineering Co., 2005 Blue Island Ave., Chicago 8, Ill. (1)  
 Aerolux Lights Corp., 653 11th Ave., New York 36, N. Y. (1, 2)  
 Amglo Corp., 2037 W. Division St., Chicago 22, Ill. (1)  
 Ampere Electronic Corp., 230 Duffy Ave., Hicksville, N. Y. (1, 2)  
 Arcturus Electronics, Inc., General Electronics Div., 101 Hazel St., Paterson, N. J. (1, 2)  
 Continental Electric Co., Geneva, Ill. (1, 2)  
 DuMont Laboratories, Inc., Allen B., 750 Bloomfield Ave., Clifton, N. J. (1, 2)  
 Eitel-McCullough, Inc., 798 San Mateo Ave., San Bruno, Calif. (2)  
 Electrons, Inc., 127 Sussex Ave., Newark 3, N. J.  
 Federal Telephone and Radio Co., 100 Kingsland Rd., Clifton, N. J. (2)

General Electric Co., Tube Dept., 1 River Rd., Schenectady 5, N. Y. (1, 2)  
 Haley Electronics Co., 57 William St., N. Y. 5, N. Y. (2)  
 Kemite Laboratories, 1817 W. Grand Ave., Chicago, Ill. (1)  
 Raytheon Mfg. Co., Waltham 54, Mass. (1, 2)  
 Sular Laboratories Inc., 1197 McCarter Highway, Newark, N. J. (1)  
 Sylvania Electric Products, Inc., 1740 Broadway, N. Y. 19, N. Y. (1, 2)  
 ● WESTINGHOUSE ELECTRIC SUPPLY CO., 40 Wall St., New York 5, N. Y. (2)—ADV. PG. SECOND COVER

# TUBES AND TUBING

1. Brass or Copper
2. Flexible Insulating
3. Neon
4. Paper
5. Porcelain
6. Steel

Aerolux Lights Corp., 653 11th Ave., New York 36, N. Y. (3)  
 Aircraft-Marine Products, Inc., 2100 Paxton St., Harrisburg, Pa. (2)  
 Alpha Wire Corp., 430 Broadway, N. Y. 13, N. Y. (2)  
 American Brass Co., 414 Meadow St., Waterbury 20, Conn. (1, 2)  
 Auburn Mfg. Co., Pease Ave. & Stack St., Middletown, Conn. (2, 4)  
 Brand & Co., Inc., William, North & Valley Sts., William, Conn. (2)  
 Chase Brass & Copper Co., Inc., 236 Grand St., Waterbury 20, Conn. (1)  
 Columbia Cable & Electric Corp., 255 Chestnut St., Brooklyn 8, N. Y. (6)  
 Corning Glass Works, Corning, N. Y. (3)  
 Crowell Tube Co., Inc., 177 Bedford St., Lexington 75, Mass. (6)  
 Dac-Ceramics Co., Main St. Extension (Box 144), Saxenburg, Pa. (5)  
 General Paper Tube Co., 2822 N. Jasper St., Phila. 34, Pa. (4)  
 Genesee Laboratory, Inc., 16 Garden St., Auburn, N. Y. (2)  
 Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo. (4)  
 Kimble Glass Co., Box 1035, Toledo 1, Ohio (3)  
 Knox Porcelain Corp., 2706 Mynders Ave. (P. O. Box 2031), Knoxville 1, Tenn. (5)  
 Line, Clyde W., 2323 W. 18 St., Chicago 8, Ill. (5)  
 Mark & Co., Clayton, 1908 Dempster St., Evanston, Ill. (6)  
 Mica Insulator Co., P. O. Box 1076, Schenectady 1, N. Y. (4)  
 Mitchell Rand Insulation Co., 51 Murray St., N. Y. 7, N. Y. (2)  
 National Copper & Smelting Co., 1862 E. 123 St., Cleveland 6, Ohio (1)  
 ● NATVAR CORP., 211 Randolph Ave., Woodbridge, N. J. (2) ADV. PG. 135  
 Nihon Tube Co., 5000 S. Whipple St., Chicago 32, Ill. (6)  
 Penn Fibre & Specialty Co., Inc., 2024 E. Westmoreland St., Phila. 34, Pa. (4)  
 Phelps Dodge Copper Products Corp., 40 Wall St., New York 5, N. Y. (1)  
 Platt Corp., 1415 Kay Highway, Baltimore 30, Md. (4)  
 Porcelain Products, Inc., P. O. Box 300, Findlay, Ohio (5)  
 Precision Tube Co., Inc., Church Rd. & Wissahickon Ave., North Wales, Pa. (1)  
 Republic Steel Corp., Steel And Tubes Div., 224 E. 131 St., Cleveland 8, Ohio (6)  
 Resistoflex Corp., 39 Plankton St., Belleville 9, N. J. (2)  
 Reverse Copper & Brass Inc., 230 Park Ave., N. Y. 17, N. Y. (1, 6)  
 Saxenburg Ceramics, P. O. Box 100, Saxenburg, Pa. (5)  
 Sonoco Products Co., Hartsville, S. C. (4)  
 Stone Paper Tube Co., 900 Franklin St., N. E., Washington 17, D. C. (4)  
 Suflex Corp., 33-40 57th St., Woodside 77, N. Y. (2)  
 Superior Porcelain Co., 931 1/2 Market St., Parkersburg, W. Va. (5)  
 Surprenant Mfg. Co., 199 Washington St., Boston 8, Mass. (2)  
 Taylor Fibre Co., Norristown, Pa. (4)  
 Triangle Conduit & Cable Co., Inc., Triangle & Jersey Aves., New Brunswick, N. J. (1)  
 Uniform Tubes, Inc., Level Rd., Collegeville 2, Pa. (1)  
 United Wire & Supply Corp., 1497 Elmwood Ave., Providence 7, R. I. (1)  
 Varflex Corp., 506 W. Court St., Rome, N. Y. (2)  
 Viking Copper Tube Co., 15700 St. Clair Ave., Cleveland 10, Ohio (1)  
 Voltarc Tubes, Inc., 44 Cross St., Norwalk, Conn. (3)  
 Walker Brothers, End St., Conshohocken, Pa. (6)  
 Youngstown Sheet and Tube Co., Stambaugh Bldg., Youngstown 1, Ohio (6)

# TURNBUCKLES

Arro Expansion Bolt Co., 1540 Boone Ave., Marion, Ohio  
 General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill.  
 Hubbard & Co., 6361 Butler St., Pittsburgh 1, Pa.  
 Kewick Mfg. Co., 5600 Third St., San Francisco 24, Calif.



# An Insulating Varnish for every ELECTRICAL UNIT

FOR EVERY ELECTRICAL WINDING, there is a Borthig Insulating Varnish that will efficiently do the job including several special materials for television components and custom built coils.

## BAKING VARNISHES:

No. K-252 Clear Synthetic Baking Varnish and No. F-150 Black Synthetic Baking Varnish: These excellent, general purpose baking varnishes are modern, polymerizing types and offer the maximum efficiency.

## AIRDRYING VARNISHES:

No. 308 Black Synthetic Airdry and No. 353 Clear Synthetic Airdry: Where baking facilities are not available and also for application to shallow coils where deep penetration is not essential.

## FINISHING TYPE INSULATING VARNISHES:

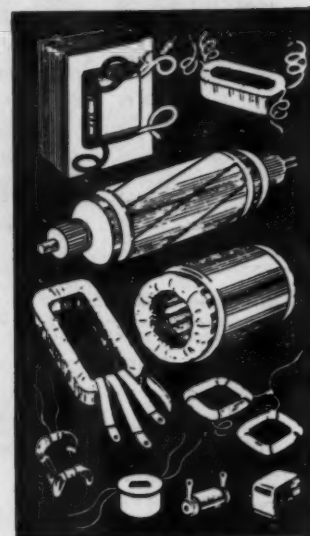
No. 400 (Homogenized) Red Enamel, No. 354 Clear Synthetic Airdry and No. 301 Black Oilproof Spirit Varnish: These protective coatings are generally applied over previously treated motor and transformer units as additional protection.

The No. 400 and No. 354 with a suitable fungicide added will meet the Army-Navy requirements for tropicalization. Ask for No. 400 F-S-X or No. 354 F-S-X.

No. 613 Red Masking Compound: For masking metal surfaces—just brush it on, allow 5 or 10 minutes to dry and peel it off after baking cycle—surface will be clean.

No. 545 Clear Lacquer: A special material for TV deflection yokes and small coil applications.

SOLVED PROBLEMS are another product we deliver!



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Laughlin Co., Thomas, 143 Fore St., Portland 6, Maine  
 Ohio Brass Co., 380 N. Main St., Mansfield, Ohio  
 Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa.  
 St. Louis Screw & Bolt Co., 6900 N. Broadway, St. Louis 15, Mo.  
 Seyler Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa.  
 Utilities Service Co., 1 Pine St., Allentown, Pa.

## TWINE

1. Armature Winding and Lacing
2. Marline

Fittler Co., Edwin H., Devereaux & Milner St., Phila. 24, Pa. (2)  
 Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo. (1)  
 Mason Silk, Inc., 25 E. 26 St., New York 10, N. Y. (1)  
 Mitchell Rand Insulation Co., 51 Murray St., N. Y. 7, N. Y. (1, 2)  
 Varflex Corp., 506 W. Court St., Rome, New York (1)

## TWISTERS

1. Sleeve Splicing
2. Wire

Crescent Tool Co., 200 Harrison St., Jamestown, N. Y. (1)  
 Klein & Sons, Mathias, 7200 McCormick Rd., Chicago 14, Ill. (1, 2)  
 Memo Engineering & Mfg. Co., Inc., Commack, L. I., N. Y. (1)  
 Rush Wire Stripper Div., Eraser Co., Inc., 1068 S. Clinton St., Syracuse 4, N. Y. (2)  
 Snap-On Tools Corp., 8028 - 28th Ave., Kenosha, Wis. (2)

## U

UNDERCUTTERS, Commutator—see SAWS, Commutator Slotting

UNIONS, Conduit Coupling—see FITTINGS, Conduit

## UNITS

Bowl Heater—see ELEMENTS, Heating, Radiant  
 Power—see PLANTS; ENGINES; GENERATORS; RECTIFIERS

## VALVES

1. Motorized
2. Solenoid-Operated

A-P Controls Corp., 2450 N. 32 St., Milwaukee 45, Wis. (2)  
 Atomatic Valve Co., Inc., 545 W. Abbott St., Indianapolis, Ind. (2)  
 Alco Valve Co., 865 Kingsland Ave., St. Louis 5, Mo. (2)  
 Automatic Switch Co., 391 Lakeside Ave., Orange, N. J. (2)  
 Automatic Temperature Control Co., Inc., 5212 Pulaski Ave., Phila. 44, Pa. (1)  
 Barber-Colman Co., P. O. Drawer 99, 1300 Rock St., Rockford, Ill. (1)  
 Beck Co., Harold, 3640 N. Second St., Philadelphia 40, Pa. (1)  
 Bristol Co., Waterbury 20, Conn. (1, 2)  
 Caltron Products Co., 1406 S. Hobart Blvd., Los Angeles 6, Calif. (2)  
 Clark Controller Co., 1146 E. 152 St., Cleveland 10, Ohio (2)  
 Cooper Co., Inc., Clark, 317 N. Market St., Paimyra, N. J. (2)  
 Cutler-Hammer, Inc., 228 N. 12th St., Milwaukee 1, Wis. (1, 2)  
 Eclipse Fuel Engineering Co., 1100 Buchanan, Rockford, Ill. (1, 2)  
 Electronics Corp. of America, 77 Broadway, Cambridge 42, Mass. (2)  
 Fischer & Porter Co., 335 Warminster Rd., Hatboro, Pa. (1)  
 Frick Co., Waynesboro, Pa. (2)  
 General Controls Co., 801 Allen Ave., Glendale, Calif. (1, 2)  
 Hauck Mfg. Co., 124-136 - 10th St., Brooklyn 15, N. Y. (1, 2)  
 Hays Mfg. Co., Industrial Sales Div., 12th and Liberty Sts., Erie 6, Pa. (2)  
 Inferno Co., 115 Ricou St., Shreveport, La. (1)  
 Kerkley Co., O. G., 400 W. Madison St., Chicago 6, Ill. (1, 2)  
 Laurence Co., R. G., 41 Highland Ave., Tenafly, N. J. (2)  
 Magnatrol Valve Corp., 67 Fifth Ave., Hawthorne, N. J. (2)  
 Marsh Corp., Jas. P., 3501 Howard St., Skokie, Ill. (2)  
 Maxon Premix Burner Co., 201 E. 18th St., (P. O. Box 71), Muncie, Ind. (1, 2)  
 Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave. S., Minneapolis 8, Minn. (1, 2)  
 Minneapolis-Honeywell Regulator Co., Industrial Div., Wayne & Windrim Aves., Phila. 44, Pa. (1, 2)



Penn Controls, Inc., Goshen, Ind. (2)  
Philadelphia Gear Works Inc., Erie Ave. & G St.,  
Phila. 34, Pa. (1)  
R & C Valve Div., American Chain & Cable Co.,  
Inc., Tulpehocken St. & Lebanon Valley R. R.,  
Reading, Pa. (1)  
Refrigerating Specialties Co., 3004 W. Lexington  
St., Chicago, Ill. (1, 2)  
Ross Operating Valve Co., 120 E. Golden Gate Ave.,  
Detroit 3, Mich. (2)  
Ruggels Klingemann Mfg. Co., Foster Court, Salem,  
Mass. (1, 2)  
Skinner Chuck Co., Skinner Electric Valve Div., 95  
Edgewood Ave., New Britain, Conn. (2)  
Square D Co., 6060 Rivard St., Detroit 11, Mich.  
(2)  
Supreme Electric Products Co., 194 Vassar St.,  
Rochester 7, N. Y. (1, 2)  
Techni-Flex Corp., 55 Jersey Ave., Port Jervis, N. Y.  
(1)  
Tork-Master Div., Harvill Corp., 6251 W. Century  
Blvd., Los Angeles 45, Calif. (1)  
White-Rodgers Electric Co., 1209 Cass Ave., St.  
Louis 6, Mo. (2)

#### VARNISH, Insulating

Borthg Co., Inc., Geo. Co., P. O. Box 115B, East  
Rutherford, N. J.  
Central Paint & Varnish Works, Inc., 59 Prospect  
St., Brooklyn 1, N. Y.  
Dow Corning Corp., P. O. Box 592, Midland, Mich.  
General Cement Mfg. Co., 919 Taylor Ave., Rock-  
ford, Ill.  
General Electric Co., Chemical & Metallurgical  
Div., Pittsfield, Mass.  
General Electric Co., Chemical & Metallurgical Div.,  
Waterford, N. Y.  
Insulation and Wires Inc., 3435 Chouteau Ave., St.  
Louis 3, Mo.  
Irvington Varnish and Insulator Div., Minnesota  
Mining and Mfg. Co., 6 Argyle Terrace, Irvington  
21, N. J.  
Lastik Products Co., Inc., 201 Iroquois Bldg., Pitts-  
burgh 13, Pa.  
Martindale Electric Co., 1383 Hird Ave., Clevel-  
and 7, Ohio  
Safety Live Line Tool Co., 973 86th Ave., Oak-  
land 21, Calif.  
Sherrin-Williams Co., 101 Prospect Ave., N. W.,  
Cleveland 1, Ohio  
Westinghouse Electric Corp., P. O. Box 868, Pitts-  
burgh 30, Pa.

#### VENTILATORS, Exhaust—see FANS; BLOWERS

#### VICES

##### 1. Machinist's, and Bench

##### 2. Pipe

American Pipe Tool Co., 4856 W. Kinzie St., Chi-  
cago 44, Ill. (2)  
Armstrong Bros. Tool Co., 5200 W. Armstrong  
Ave., Chicago 30, Ill. (2)  
Billings & Spencer Co., 1 Laurel St., Hartford 1,  
Conn. (1, 2)  
Birtman Electric Co., 4140 Fullerton Ave., Chi-  
cago 39, Ill. (1)  
Capewell Mfg. Co., 60-70 Governor St., Hartford  
2, Conn. (2)  
Columbian Vise & Mfg. Co., 9021 Bessemer Ave.,  
Cleveland 4, Ohio (1, 2)  
Desmond-Stephan Mfg. Co., 317 S. Walnut St.,  
Urbana, Ohio (1, 2)  
Erie Tool Works, 12th & Liberty Sts., Erie, Pa.  
(2)  
Hollands Mfg. Co., 342-352 E. 18 St., Erie, Pa.  
(1, 2)  
Lint, Clyde W., 2323 W. 18 St., Chicago 8, Ill.  
(2)  
Millers Falls Co., 57 Wells St., Greenfield, Mass.  
(1)  
Milwaukee Parts Corp., 607-15 S. Sixth St., Mil-  
waukee 4, Wis. (1)  
Nye Tool Co., 4120-30 Fullerton Ave., Chicago 32,  
Ill. (2)  
Parker Co., Charles, 90 Hanover St., Meriden,  
Conn. (1, 2)  
Reed Mfg. Co., 1456 W. 8th St., Erie, Pa. (1, 2)  
Ridge Tool Co., 400 Clark St., Elyria, Ohio (2)  
Vanderman Mfg. Co., Mansfield Ave., Willimantic,  
Conn. (2)  
Western Wire Products Co., 1415-35 S. 18 St.,  
St. Louis 4, Mo. (2)  
Yankee Tools, Lehigh Ave. & American St., Phila.  
33, Pa. (1)

#### VOLT-AMMETERS

Airsco Mfg. Co., Inc., 435 Melwood St., Pitts-  
burgh 13, Pa.  
Columbia Electric Mfg. Co., 4541 Hamilton Ave.,  
Cleveland 14, Ohio  
Electro-Mechanical Instrument Co., 812 Chestnut  
St., Perkasie, Pa.  
EPCO Electronics, Inc., 140 Liberty St., N. Y. 6,  
N. Y.  
Ferranti Electric, Inc., 30 Rockefeller Plaza, N. Y.  
20, N. Y.  
Fielden Instrument Div., Robertshaw-Fulton Con-  
trols Co., 2920 N. Fourth St., Phila. 33, Pa.  
General Controls Co., 801 Allen Ave., Glendale,  
Calif.  
General Electric Co., Apparatus Sales Div., 1 River  
Road, Schenectady 5, N. Y.  
General Electronic Distributing Co., 98 Park Pl.,  
New York 7, N. Y.  
Instrument Laboratories, 315 W. Walton Pl., Chi-  
cago 10, Ill.

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Schauer Mfg. Corp., 4500 Alpine Ave., Rossmore,  
Ohio  
Sensitive Research Instrument Corp., 9 Elm Ave.,  
Mount Vernon, N. Y.  
Technology Instrument Corp., 531 Main St., Acton,  
Mass.  
Triplett Electrical Instrument Co., 286 Harmon  
Rd., Bluffton, Ohio  
Weston Electrical Instrument Corp., 614 Freling-  
hysen Ave., Newark 5, N. J.

#### VOLTMETERS

1. Clamp-On
2. Electrostatic
3. Panel Mounting
4. Pocket
5. Portable
6. Recording
7. Switchboard

Aerolux Lights Corp., 653 11th Ave., New York 36,  
N. Y. (4)  
Airsco Mfg. Co., Inc., 435 Melwood St., Pitts-  
burgh 13, Pa. (3)  
Assembly Products, Inc., Chesterland 31, Ohio  
(3, 5)  
Barber-Colman Co., P. O. Drawer 99, 1300 Rock  
St., Rockford, Ill. (3, 6)  
Arga Div., Beckman Instruments, Inc., 220 Pasa-  
dena Ave., South Pasadena, Calif. (3)  
Burlington Instrument Co., Burlington, Iowa (3, 5)  
Burton-Rogers Co., 42 Carleton St., Cambridge 42,  
Mass. (3, 5, 7)  
Columbia Electric Mfg. Co., 4519 Hamilton Ave.,  
Cleveland 14, Ohio (1)  
Electro-Mechanical Instrument Co., 812 Chestnut  
St., Perkasie, Pa. (3, 4)  
Electronic Measurements Co., Inc., Lewis St. & Maple  
Ave., Eatontown, N. J. (5)  
EPCO Electronics, Inc., 140 Liberty St., N. Y. 6,  
N. Y. (5)  
Esterline-Angus Co., Inc., P. O. Box 596, Indian-  
apolis 6, Ind. (6)  
Ferranti Electric, Inc., 30 Rockefeller Plaza, N. Y.  
20, N. Y. (1, 2)  
Fielden Instrument Div., Robertshaw-Fulton Con-  
trols Co., 2920 N. Fourth St., Phila. 33, Pa. (6)  
General Controls Co., 801 Allen Ave., Glendale,  
Calif. (5)  
General Electric Co., Apparatus Sales Div., 1 River  
Road, Schenectady 5, N. Y. (1, 2, 3, 4, 5, 6, 7)  
General Electronic Distributing Co., 98 Park Pl.,  
New York 7, N. Y. (5)

Green, Inc., R. H., 1201 24th St., Oakland 7,  
Calif. (6, 7)  
Hickok Electrical Instrument Co., 10514 Dupont  
Ave., Cleveland 8, Ohio (1, 3, 4, 5, 7)  
Industrial Devices Inc., Edgewater 19, N. J. (4, 5)  
Larson Instrument Co., 24 Orchard St., Tarrytown,  
N. Y. (6)  
Marion Electrical Instrument Co., 400 Canal St.,  
Manchester, N. H. (3, 7)  
Martindale Electric Co., 1383 Hird Ave., Cleveland  
7, Ohio (1, 4, 5)  
Meters, Inc., 5353 N. Keystone Ave., Indianapolis  
20, Ind. (3)  
Doelcam Div., Minneapolis-Honeywell Reg. Co., 1400  
Soldiers Field Rd., Boston 35, Mass. (5)  
Pyramid Instrument Corp., 630 Merrick Rd., Lyn-  
brook, N. Y. (1, 4)  
Radio City Products Co., Inc., Centre and Glen-  
dale Sts., Easton, Pa. (5)  
Rawson Electrical Instrument Co., 124 Potter St.,  
Cambridge 42, Mass. (2, 5)  
Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa.  
(3, 5, 7)  
Sanborn Co., 195 Massachusetts Ave., Cambridge,  
Mass. (6)  
Sensitive Research Instrument Corp., 9 Elm Ave.,  
Mount Vernon, N. Y. (2, 3, 5)  
Simpson Electric Co., 3200 W. Kinzie St., Chicago  
44, Ill. (3, 7)  
Square D Co., 6060 Rivard St., Detroit 11, Mich. (4)  
Sticht Co., Inc., Herman H., 27 Park Place, New  
York 7, N. Y. (1, 2, 5, 6)  
Technology Instrument Corp., 531 Main St., Acton,  
Mass. (5)  
Telectro Industries Corp., 35-16 37th St., Long  
Island City 1, N. Y. (1, 2)  
Triplett Electrical Instrument Co., 286 Harmon Rd.,  
Bluffton, Ohio (3, 5, 7)  
U. S. Gauge Div., American Machine & Metals,  
Inc., Clymer Ave., Sellersville, Pa. (3)  
Weston Electrical Instrument Corp., 614 Freling-  
hysen Ave., Newark 5, N. J. (1, 3, 4, 5, 6, 7)

#### W

#### WASHERS

1. Brass or Copper
2. Centering
3. Insulating
4. Iron or Steel
5. Leather
6. Lock
7. Reducing

Acme Mfg. & Gasket Co., 738 N. 41 St., Phila. 4,  
Pa. (1, 3, 4, 5)

## PRODUCT DIRECTORY

Adair Mfg. Co., 14300 Larkin Ave., Cleveland 11, Ohio. (3)  
 Allmetal Screw Products Co., Inc., Garden City, N. Y. (4, 6)  
 American Brass Co., 414 Meadow St., Waterbury 20, Conn. (1)  
 American Lava Corp., Cherokee Blvd. & Mrs. Rd., Chattanooga 5, Tenn. (3)  
 Argo Products Co., 1008 N. 22 St., St. Louis 6, Mo. (4)  
 Arrol Corp., Foot of Bower St., Montgomery, Pa. (7)  
 Atlas Bolt & Screw Co., 1130 Ivanhoe Rd., Cleveland 20, Ohio (4, 6)  
 Atlas Screw & Specialty Co., 450 Broome St., N. Y. N. Y. (1, 4, 6)  
 Auburn Mfg. Co., Pass Ave. & Stack St., Middletown, Conn. (1, 2, 3, 4, 5)  
 Bethlehem Steel Co., Bethlehem, Pa. (4)  
 Bowers Mfg. Co., Inc., 6700 Avalon Blvd., Los Angeles 3, Calif. (7)  
 Brand Dielectrics, Inc., 57 North St., Williamstic, Conn. (3)  
 Brewer-Titchener Corp., 111 Port Watson St., Cortland, N. Y. (4)  
 Chase Brass & Copper Co., Inc., 236 Grand St., Waterbury 20, Conn. (1, 6)  
 Chicago Belting Div., Chicago-Allis Mfg. Corp., 125 N. Green St., Chicago 7, Ill. (5)  
 Chicago Rawhide Mfg. Co., 1301 Elston Ave., Chicago 22, Ill. (5)  
 Continental-Diamond Fibre Co., Newark, Del. (3)  
 Dossert Mfg. Corp., 249-255 Huren St., Brooklyn 22, N. Y. (1)  
 Du-Co Ceramics Co., Main St. Extension (Box 144), Saxonburg, Pa. (3)  
 Electrical Fittings Corp., 37-50 57th St., Woodside 77, N. Y. (7)  
 Electrical Mfg. Co., Box 217, Battle Creek, Mich. (2, 4, 6)  
 Excelsior Leather Washer Mfg. Co., Inc., 720 Chestnut St., Rockford, Ill. (5)  
 Federal Screw Products, Inc., 3917-25 N. Kedzie Ave., Chicago 18, Ill. (1, 3, 4, 6)  
 Felt Products Mfg. Co., 1514 Carroll Ave., Chicago 7, Ill. (1, 2, 3, 5)  
 Fluorocarbon Products Div., United States Gasket Co., 602 N. 10 St. (P. O. Box 93), Camden 1, N. J. (3)  
 Freeway Washer & Stamping Co., P. O. Box 1756, Cleveland, Ohio (1, 4)  
 Gedney Electric Co., Americas Bldg., Radio City, N. Y. 20, N. Y. (4, 7)  
 General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill. (2, 3, 4, 6)  
 Gries Reproductor Corp., 123 Beechwood St., New Rochelle, N. Y. (3)  
 Harper Co., H. M., 8200 Lehigh Ave., Morton Grove, Ill. (1, 6)  
 Hobbs Mfg. Co., 26 Salisbury St., Worcester, Mass. (6)  
 Hubbard & Co., 6301 Butler St., Pittsburgh 1, Pa. (2, 4, 6)  
 Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo. (3, 4)  
 Joslyn Mfg. and Supply Co., 20 N. Wacker Drive, Chicago 6, Ill. (4)  
 Knox Porcelain Corp., 2706 Mynders Ave. (P. O. Box 2031), Knoxville 1, Tenn. (5)  
 Kortick Mfg. Co., 5600 Third St., San Francisco 24, Calif. (2, 4, 6)  
 Lehnried Mfg. Corp., C. H., 95-101 Gurnsey St., Brooklyn 22, N. Y. (4)  
 Malleable Iron Fittings Co., Branford, Conn. (2, 4)  
 Martindale Electric Co., 1383 Hird Ave., Cleveland 7, Ohio (3)  
 Masson Co. Inc., M. Ross, 2160 Montcalm St., Indianapolis 2, Ind. (5)  
 Melectrics, Inc., 677 Broadway, N. Y. 12, N. Y. (7)  
 Mica Insulator Co., P. O. Box 1076, Schenectady 1, N. Y. (3)  
 Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (2, 4, 6)  
 Paine Co., Fullerton Ave. & Westgate Rd., Addison, Ill. (4)  
 Penn Fibre & Specialty Co., 2024 E. Westmoreland St., Phila. 34, Pa. (1, 3, 4, 5)  
 Philadelphia Steel & Wire Corp., Penn St. & Belfield Ave., Phila. 44, Pa. (6)  
 Plasticraft Products Co., 1 Station Plaza, West Nyack, N. Y. (3)  
 Polymer Corp. of Pa., Reading, Pa. (3)  
 Positive Lock Washer Co., Ave. A & Miller St., Newark 5, N. J. (6)  
 Richards Co., J. R., P. O. Box 402, Carnegie, Pa. (7)  
 Rockford Bolt & Steel Co., 126 Mill St., Rockford, Ill. (4, 6)  
 Rogers Corp., Rogers, Conn. (3)  
 Roller, Inc., Wm. G., 159 Liberty Ave., Mineola, N. Y. (7)  
 St. Louis Screw & Bolt Co., 6900 N. Broadway, St. Louis 15, Mo. (4, 6)  
 Saylor Mfg. Co., P. O. Box 9564, Pittsburgh 23, Pa. (2, 4, 6)  
 Shakeproof Div., Illinois Tool Works, St. Charles, Ill. (1)  
 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif. (1)  
 Silicone Insulation, Inc., 567 Third Ave., New York 16, N. Y. (3)  
 Spaulding Fibre Co., Inc., 310 Wheeler St., Tonawanda, N. Y. (3)  
 Steel Co., Herman D., 225 Lafayette Bldg., Phila. 6, Pa. (1, 4)  
 Steel Electric Products Co., Inc., 5602 18th Ave., Brooklyn 4, N. Y. (1, 2, 3, 4, 6, 7)  
 Sweet Iron Works, A. L., 166 Glenwood Ave., Medina, N. Y. (4)  
 Taylor Fibre Co., Norristown, Pa. (3)

Thepitt Mfg. Co., Gregg & Hammond Sts., Carnegie, Pa. (7)  
 Thomas & Betts Co., 36 Butler St., Elizabeth 1, N. J. (7)  
 Thompson-Bramer & Co., 520 N. Dearborn St., Chicago 10, Ill. (6)  
 Utilities Service Co., 1 Pine St., Allentown, Pa. (2, 4, 6)  
 Wilmington Fibre Specialty Co., New Castle, Dela. (3)  
 Wrought Washer Mfg. Co., 2280 S. Bay St., Milwaukee 7, Wis. (1, 2, 3, 4)  
 Yorkville Metal Products Co., 677 Broadway, N. Y. 12, N. Y. (1, 3, 4, 6, 7)

### WATTMETERS

Bristol Co., Waterbury 20, Conn.  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y.  
 Roller-Smith Corp., 1001 8th Ave., Bethlehem, Pa.  
 Sensitive Research Instrument Corp., 9 Elm Ave., Mount Vernon, N. Y.  
 Teletron Industries Corp., 35-16 37th St., Long Island City 1, N. Y.  
 Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.  
 Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark 5, N. J.

### WEDGES, Armature

Insulation Mfrs. Corp., 565 W. Washington Blvd., Chicago 6, Ill.  
 Insulation and Wires Inc., 3435 Chouteau Ave., St. Louis 3, Mo.  
 National Electric Coil Co., 800 King Ave., Columbus 16, Ohio  
 Silicone Insulation, Inc., 567 Third Ave., New York 16, N. Y.

### WELDERS

1. Arc
2. Atomic Hydrogen
3. Spot, Butt or Seam
4. Stud

Acme Electric Welder Co., 2518 Fruitland Ave., Los Angeles 58, Calif. (3)  
 Acro Welder Mfg. Co., 1825 W. St. Paul Ave., Milwaukee 3, Wis. (3)  
 Air Reduction Sales Co., 60 E. 42 St., N. Y. 17, N. Y. (1, 3)  
 Ames Spot Welder Co., Inc., 1328 50th St., Brooklyn 19, N. Y. (3)  
 Birdsall Mfg. Co., Inc., 750 San Antonio Rd., Palo Alto, Calif. (1, 3)  
 Central Transformer Corp., P. O. Box 687, Pine Bluff, Ark. (3)  
 Dayton Electric Mfg. Co., 126 S. Oakley Blvd., Chicago 12, Ill. (1)  
 Eisler Engineering Co., Inc., 750 S. 13 St., Newark 3, N. J. (3)  
 Electric Arc, Inc., 152 Jelliff Ave., Newark 8, N. J. (1)  
 Federal Machine and Welder Co., Clermont & Overland Ave., Warren, Ohio (3)  
 Flood City Brass & Electric Co., Messenger & Elder Sts., Johnstown, Pa. (1)  
 General Electric Co., Apparatus Sales Div., 1 River Road, Schenectady 5, N. Y. (1, 2, 4)  
 Glenn Co., 3134 E. 10 St., Oakland, Calif. (1)  
 Graham Co., Inc., Phillip E., 2606 W. Michigan St., Indianapolis 22, Ind. (3)  
 Graham Mfg. Corp., 1541 E. Eight Mile Rd., Ferndale, Mich. (4)  
 Guyan Machinery Co., Inc., Box 150, Logan, W. Va. (1)  
 Hobart Bros., Hobart Square, Troy 1, Ohio (1)  
 Lee Co., K. O., Congress at First Ave., S. E., Aberdeen, S. Dak. (1)  
 Lincoln Electric Co., 22801 St. Clair Ave., Cleveland 17, Ohio (1)  
 Linde Air Products Co., 30 E. 42 St., N. Y. 17, N. Y. (1)  
 Mid-States Welder Mfg. Co., 6025 S. Ashland Ave., Chicago 35, Ill. (1)  
 Miller Electric Mfg. Co., 718 S. Bounds St., Appleton, Wis. (1)  
 National Electric Welding Machines Co., 1846-1916 N. Trumbull St., Bay City, Mich. (3)  
 National Super Service Co., Inc., 1946 N. 13 St., Toledo, Ohio (1)  
 Peer, Inc., 1220 Milton St., Benton Harbor, Mich. (3)  
 Precision Welder Mfg. Co., 660 W. Grand Ave., Chicago 10, Ill. (1)  
 Raytheon Mfg. Co., Equipment Marketing Div., 100 River St., Waltham 54, Mass. (3)  
 Rex Welder & Engineering Co., 409 S. West Blvd., Kansas City 8, Mo.  
 Sclaky Bros., Inc., 4916 W. 67th St., Chicago 38, Ill. (3)  
 Seager Standard Carbon Co., 291 Church St., New York 13, N. Y. (3)  
 Sittler Corp., 18 N. Ada St., Chicago 7, Ill. (3)  
 Taylor-Winfield Corp., 1052 Mahoning Ave., Warren, Ohio (3)  
 Trindl Products, Ltd., 1807-11 S. Clark St., Chicago 16, Ill. (1)  
 Universal Welder Corp., 2557 E. 79 St., Cleveland 4, Ohio (3)  
 Vickers Electric Div., Vickers Inc., 1847 Locust St., St. Louis 3, Mo. (1)  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa. (1)



## ACE Coil Winding Machines

(7 different models)

## ACE Formers - Spreaders

(3 different models)

## ACE Winding heads

## ACE De-Reelers

Manufactured by

## ARMATURE COIL EQUIPMENT, INC.

2603 Vega Avenue  
 Cleveland 13, Ohio

Write for descriptive catalog  
 and price list.

### WINCHES

1. Fixture Lowering
2. Truck
3. Wire Pulling

Atlas Industrial Corp., 849 39th St., Brooklyn, N. Y. (1, 3)  
 B M D & R Inc., 7020 Walker St., St. Louis Park, Minneapolis 16, Minn. (1)  
 Four Wheel Drive Auto Co., 105 E. 12 St., Clintonville, Wis. (2)  
 Gar Wood Industries Inc., Wayne, Mich. (2)  
 Gillespie Co., Robert, Pine Street, Ware, Mass. (1)  
 Highway Trailer Co., 405 E. Fulton St., Edgerton, Wis. (3)  
 Holan Corp., J. H., 4100 W. 150 St., Cleveland 11, Ohio (2)  
 McCabe-Powers Auto Body Co., 5900 N. Broadway, St. Louis 15, Mo. (2)  
 Revere Electric Mfg. Co., 6017 Broadway, Chicago 40, Ill. (1)  
 Robbins & Myers, Inc., 1345 Lagonda Ave., Springfield, Ohio (1)  
 Robot Appliances, Inc., 7041 Orchard St., Dearborn, Mich. (1, 3)  
 Round & Son, Inc., David, Box 883, Cleveland 22, Ohio (1, 2, 3)  
 Sassen Derrick Co., 3101 Grand Ave., Chicago, Ill. (1, 2)  
 Shepard Niles Crane & Hoist Corp., Schuyler Ave., Montour Falls, N. Y. (1)  
 Silent Hoist & Crane Co., 841-63rd St., Brooklyn 20, N. Y. (2, 3)

### WINDERS

1. Armature and Field
2. Coil

Armature Coil Equipment, Inc., 2603 Vega Ave., Cleveland 13, Ohio (1, 2)  
 Chapman Electrical Works Inc., P. E., 1820 Chouteau Ave., St. Louis 3, Mo. (1, 2)  
 Crown Industrial Products Co., 713 Amsterdam St., Woodstock, Ill. (2)  
 Eisler Engineering Co., Inc., 750 S. 13 St., Newark 3, N. J. (2)  
 Electric Service Mfg. Co., 17th & Cambria Sts., Phila. 32, Pa. (1, 2)  
 Potter & Rayfield, Inc., P. O. Box 1042, Atlanta, Ga. (1, 2)  
 Universal Winding Co., P. O. Box 1605, Providence 1, R. I. (2)

WINDINGS—see COILS

WINDLASSES—see WINCHES

**WIRE (Classified as to Composition)**

1. Aluminum, Bare
2. Asbestos, Covered
3. Braided and Lead-Sheathed
4. Copper or Brass, Bare
5. Cotton-Covered and Paraffined
6. Covered, Stranded, Enameled (Litz)
7. Glass-Covered
8. Metal-Shielded
9. Mineral-Insulated
10. Oil-Impregnated
11. Rubber-Covered
12. Rubber-Covered and Braided
13. Steel, Copper Covered
14. Thermoplastic
15. Thinwall Insulated
16. Tungsten

Accurate Insulated Wire Corp., 25 Fox St., New Haven 13, Conn. (8, 11, 12, 14)  
 All-State Welding Alloys Co., Inc., 249-55 Ferris Ave., White Plains, N. Y. (1)  
 Alpha Wire Corp., 430 Broadway, N. Y. 13, N. Y. (4, 5, 7, 8, 11, 12, 14, 15)  
 Alphaduct Wire & Cable Co., Ford Ave. (Box 67), Milltown, N. J. (5, 7, 8, 11, 12, 14)  
 Aluminum Co. of America, 1501 Alcoa Bldg., Pittsburgh 19, Pa. (1)  
 American Brass Co., 414 Meadow St., Waterbury 20, Conn. (4)  
 American Electric Cable Co., 181 Appleton St., Holyoke, Mass. (5, 7, 8, 14)  
 American Insulated Wire Corp., 36 Freeman St., Pawtucket, R. I. (2, 3, 4, 5, 8, 11, 12, 14)  
 American Phenolic Corp., 1830 S. 54th St., Chicago 50, Ill. (14)

**AMERICAN STEEL & WIRE DIV., UNITED STATES STEEL CORP., Rockefeller Bldg., Cleveland 13, Ohio (1, 2, 3, 4, 5, 7, 11, 12, 14, 15)—ADV. PG. 93, 94, 95, 96**

Anaconda Wire & Cable Co., 25 Broadway, New York 4, N. Y. (1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 14, 15)  
 Ansonia Wire & Cable Co., 63 Main St., Ansonia, Conn. (14)  
 Arcos Corp., 1500 S. 50 St., Phila. 43, Pa. (1)  
 Belden Mfg. Co., 4647 W. Van Buren St., Chicago 44, Ill. (2, 3, 6, 11, 12, 14)  
 Berkshire Electric Cable Co., Leeds, Mass. (5, 14, 15)

Brand & Co., Inc., William North & Valley Sts., Willimantic, Conn. (7, 14, 15)  
 Carol Cable Co., 190 Middle St., Pawtucket, R. I. (11, 12)

Chase Brass & Copper Co., Inc., 236 Grand St., Waterbury 20, Conn. (4, 7)  
 Chester Cable Corp., Oakland Ave., Chester, N. Y. (5, 7, 8, 14, 15)

Circle F Mfg. Co., 720 Monmouth St., Trenton 4, N. J. (2, 3, 7, 11, 12, 14)  
 Circle Wire and Cable Corp., 5500 Maspeth Ave., Maspeth, L. I., N. Y. (3, 4, 8, 11, 12, 14, 15)

Clifton Conduit Co., Inc., 75 Montgomery St., Jersey City 2, N. J. (8, 11, 12, 14)  
 Collyer Insulated Wire Co., 249 Roosevelt Ave., Pawtucket, R. I. (2, 3, 7, 8, 11, 12, 14, 15)

Columbia Cable & Electric Corp., 255 Chestnut St., Brooklyn 8, N. Y. (14, 15)  
 Columbia Wire & Supply Co., 2850 Irving Park Rd., Chicago 18, Ill. (2, 4, 7, 8, 11, 12, 14)

Continental Wire Corp., York, Pa. (2, 5, 7, 8, 14, 15)  
 Copperweld Steel Co., Wire and Cable Div., Glassport, Pa. (4, 13)

Cornish Wire Co., Inc., 50 Church St., N. Y. 7, N. Y. (2, 5, 7, 11, 12, 14, 15)  
 Diamond Wire & Cable Co., 445 Park Ave., Syracuse, Ill. (2, 4, 5, 8, 11, 12, 14)

Electric Auto-Lite Co., Wire & Cable Div., Port Huron, Mich. (4, 5, 6, 8, 11, 12, 14, 15)  
 Empire Wire and Cable Co., Penn Yan, N. Y. (5)

Ettco Wire & Cable Corp., 75 Onderdonk Ave., Brooklyn 37, N. Y. (14)  
 Fidelity Machine Co., Inc., 3908 Frankford Ave., Phila. 24, Pa. (5, 7)

**GENERAL CABLE CORP., 420 Lexington Ave., N. Y. 17, N. Y. (1 through 12, 14, 15)—ADV. PG. 58**  
 General Electric Co., Construction Materials Div., 1285 Boston Ave., Bridgeport 2, Conn. (2, 3, 5, 7, 8, 11, 12, 14, 15)

General Electric Co., Lamp Division, Nela Park, East Cleveland 12, Ohio (16)  
 General Insulated Wire Works, Inc., 69 Gordon Ave., Providence 5, R. I. (2, 11, 12, 14)

**GRAYBAR ELECTRIC CO., INC., 420 Lexington Ave., N. Y. 17, N. Y. (11)—ADV. PG. 2**  
 Green, Inc., R. H., 1201 24th St., Oakland 7, Calif. (4)

Hatfield Wire and Cable Div., Continental Copper & Steel Indus., Inc., 487 Hillside Ave., Hillside 5, N. J. (2, 3, 4, 5, 7, 8, 11, 12, 14, 15)

Hiltemp Wires, Inc., 26 Windsor Rd., Mineola, L. I., N. Y. (6, 7, 8, 14, 15)  
 Kennecott Wire and Cable Co., Phillipsdale (Rumford 16), R. I. (2, 3, 5, 6)

Linde Air Products Co., 30 E. 42 St., N. Y. 17, N. Y. (1, 4)  
 Lowell Insulated Wire Div., Overlake Corp., 171 Lincoln St., Lowell, Mass. (11, 14)

Miller Electric Co., 120 Main St., Pawtucket, R. I. (2, 5, 14, 15)  
 National Electric Products Corp., Gateway Center, 140 Stanwix St., Pittsburgh 22, Pa. (2, 3, 6, 7, 8, 11, 12, 14)

National-Standard Co., Wayne St., Niles, Mich. (13)  
 Nehring Electrical Works, 9th & Locust Sts., Dekalb, Ill. (1, 4, 5, 7, 14)  
 New England Electrical Works, Inc., 365 Main St., Lisbon, N. H. (4, 5, 6)

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Nichols Wire & Aluminum Co., 1725 Rockingham Rd., Davenport, Iowa (1)

**OKONITE CO., Passaic, N. J. (2, 3, 5, 7, 8, 10, 11, 12, 14, 15)—ADV. PG. 137**  
 Phalo Plastics Corp., 25 Foster St., Worcester 8, Mass. (5, 8, 14)

**PHELPS DODGE COPPER PRODUCTS CORP., 40 Wall St., New York 5, N. Y. (2, 3, 4, 7, 8, 10, 11, 12, 13, 14, 15)—ADV. PG. 98-99**  
 Plastic Wire & Cable Corp., E. Main St., Jewett City, Conn. (5, 14, 15)

Plastoid Corp., 42-61 24th St., L. I. C. 1, N. Y. (5, 7, 8, 14, 15)  
 Revere Copper & Brass Inc., 230 Park Ave., N. Y. 17, N. Y. (4)

Revere Corp. of America, Wallingford, Conn. (2, 14)  
 Reynolds Metals Co., 2500 S. 3rd St., Louisville 1, Ky. (1)

Rhode Island Insulated Wire Co., Inc., 50 Burnham Ave., Cranston, R. I. (2, 5, 7, 11, 14)  
 Rockbestos Products Corp., Nicoll and Canner Sts., New Haven 4, Conn. (2, 3, 7, 8, 14)

Roebeling's Sons Corp., John A., 640 S. Broad St., Trenton 2, N. J. (11, 12)  
**ROME CABLE CORP., Ridge St., Rome, N. Y. (1, 2, 3, 4, 5, 7, 8, 11, 12, 14)—ADV. PG. 122-123**

Royal Electric Co., Inc., 95 Grand Ave., Pawtucket, R. I. (2, 5, 11, 12, 14)  
 Sequoia Process Corp., 871 Willow St. (P. O. Box 1007), Redwood City, Calif. (14)

**SIMPLEX WIRE & CABLE CO., 79 Sidney St., Cambridge 39, Mass. (11, 12, 14)—ADV. PG. 142**  
 Sittler Corp., 18 N. Ada St., Chicago 7, Ill. (4, 14)

Southern Electrical Corp., P. O. Box 989, Chattanooga 5, Tenn. (1, 4)  
 Spargo Wire Co., Inc., Railroad St., Rome, N. Y. (1, 4)

Suffex Corp., 33-45 57th St., Woodside 77, N. Y. (5, 7, 14, 15)  
 Surprenant Mfg. Co., 199 Washington St., Boston 8, Mass. (7, 14, 15)

Sylvania Electric Products, Inc., 1740 Broadway, N. Y. 19, N. Y. (13, 16)  
 Touch-Plate Mfg. Corp., 16530 Garfield, Paramount, Calif. (14)

Triangle Conduit & Cable Co., Inc., Triangle & Jersey Aves., New Brunswick, N. J. (1, 3, 4, 5, 8, 11, 12, 14)  
 Uniform Tubes, Inc., Level Rd., Collegeville 2, Pa. (8)

**UNITED STATES RUBBER CO., ELECTRICAL WIRE AND CABLE DEPT., 1230 Avenue of the Americas, New York 20, N. Y. (1, 3, 4, 5, 7, 8, 11, 12, 14, 15)—ADV. PG. 144**  
 United States Rubber Co. Mechanical Goods Div., 1230 Avenue of the Americas, New York 20, N. Y. (8, 11, 12, 14)

U. S. Wire & Cable Corp., Progress & Monroe Sts., Union, N. J. (8, 13, 14, 15)  
 United Wire & Supply Corp., 1497 Elmwood Ave., Providence 7, R. I. (1, 4)  
 Walker Brothers, End St., Conshohocken, Pa. (3, 12, 14)  
 Western Insulated Wire Co., 2425 E. 30th St., Los Angeles 58, Calif. (2, 11, 12)  
 Wheeler Insulated Wire Co., 150 E. Aurora St., Waterbury 20, Conn. (6)  
 Whitney Blake Co., 1565 Dixwell Ave., Hamden, Conn. (8, 11, 12, 14)

**WIRE (Classified as to Usage)**

1. Annunciator
2. Binding, Tinned
3. Blasting
4. Building
5. Extension Convenience Outlet
6. Fuse
7. Ground, Armored
8. Line, Iron
9. Resistance
10. Resistance, Asbestos Core
11. Sealing
12. Telephone
13. Weatherproof
14. Welding

Accurate Insulated Wire Corp., 25 Fox St., New Haven 13, Conn. (4, 12)  
 All-State Welding Alloys Co., 249-55 Ferris Ave., White Plains, N. Y. (14)  
 Alloy Rods Co., Lincoln Highway West, York, Pa. (14)  
 Alpha Wire Corp., 430 Broadway, N. Y. 13, N. Y. (12, 13)  
 Alphaduct Wire & Cable Co., Ford Ave. (Box 67), Milltown, N. J. (4, 12)  
 American Brass Co., 414 Meadow St., Waterbury 20, Conn. (1, 2, 14)  
 American Electric Cable Co., 181 Appleton St., Holyoke, Mass. (12)  
 American Insulated Wire Corp., 36 Freeman St., Pawtucket, R. I. (1, 4, 5, 9, 10, 12, 13)  
 American Metal Moulding Co., 146 Coit St., Irvington, N. J. (7)  
 Anaconda Wire & Cable Co., 25 Broadway, New York 4, N. Y. (1, 2, 3, 4, 5, 6, 7, 12, 13, 14)  
 Arcos Corp., 1500 S. 50 St., Phila. 43, Pa. (14)  
 Auto Arc-Weld Mfg. Co., 9615 Meech Ave., Cleveland 5, Ohio (14)  
 Beckley Electric Co., Inc., 468-470 Grand Ave., Brooklyn 38, N. Y. (1, 5)  
 Belden Mfg. Co., 4647 W. Van Buren St., Chicago 44, Ill. (1, 14)  
 Berkshire Electric Cable Co., Leeds, Mass. (3, 10, 12)



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**Glazon Building Wire**—Types R, RP, RH-RW  
Sizes #14-6 AWG. 0-600 Volts



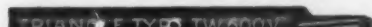
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RP, RH-RW. Sizes #4-1000 MCM. 0-600 Volts



**Neoprene Line Wire**—Weatherproof Sizes—  
Solid #14-4 AWG. Stranded #14-4/0 AWG



**Fixture Wire**—Types TF and TFF.  
Thermoplastic insulation.  
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**New Silver TRIEX Non Metallic Sheathed Cable.**  
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**Armored Cable**—Hot-Dip galvanized armor.  
Double bushed and bonded. 1-4 conductors.

# TRIANGLE

CONDUIT & CABLE CO., INC.

® New Brunswick, New Jersey



Bussmann Mfg. Co., 2536 W. University St.,  
St. Louis 7, Mo. (6)  
Chester Cable Corp., Oakland Ave., Chester, N. Y.  
(1, 3, 4, 12, 13)  
Cincinnati Pump & Mfg. Co., Inc., 3182 Beekman St.,  
Cincinnati 23, Ohio (2)  
Circle F Mfg. Co., 720 Monmouth St., Trenton 4,  
N. J. (3, 5)  
Circle Wire and Cable Corp., 5500 Maspeth Ave.,  
Maspeth, L. I., N. Y. (1, 4, 5, 7, 13)  
Clifton Conduit Co., Inc., 75 Montgomery St.,  
Jersey City 2, N. J. (4, 7, 13)  
Columbia Cable & Electric Corp., 295 Chestnut St.,  
Brooklyn 8, N. Y. (4, 7)  
Columbia Wire & Supply Co., 2850 Irving Park Rd.,  
Chicago 18 Ill. (4, 9, 12, 13)  
Commercial Enclosed Fuse Co. of N. J., 6812 Polk  
St., Guttenberg, N. J. (6)  
Continental Wire Corp., York, Pa. (3, 4, 12)  
Copperweld Steel Co., Wire and Cable Div., Glass-  
port, Pa. (12, 13)  
Cornish Wire Co., Inc., 50 Church St., N. Y. 7,  
N. Y. (1, 3)  
Couch Co., Inc., S. H., 3 Arlington St., North  
Quincy 71, Mass. (1, 12)  
Crucible Steel Co. of America, P. O. Box 88,  
Henry W. Oliver Bldg., Pittsburgh 30, Pa. (14)  
Diamond Wire & Cable Co., 445 Park Ave., Syc-  
amore, Ill. (1, 3, 4, 5, 12, 13, 14)  
Driver Co., Wilbur B., 150 Riverside Ave., Newark  
4, N. J. (9, 10)  
Eagle Electric Mfg. Co., Inc., 23-10 Bridge Plaza  
South, Long Island City 1, N. Y. (9)  
Electric Auto-Lite Co., Wire & Cable Div., Port  
Huron, Mich. (4)  
Empire Wire and Cable Co., Penn Yan, N. Y.  
(1, 3, 4, 12)  
Erickson Mfg. Co., 5209 Euclid Ave., P. O. Box  
1401, Cleveland 3, Ohio (5)  
Ettco Wire & Cable Corp., 75 Onderdonk Ave.,  
Brooklyn 37, N. Y. (4)  
Fidelity Machine Co., Inc., 3908 Frankford Ave.,  
Phila. 24, Pa. (4, 13)  
Gem Electric Mfg. Co., Inc., 237 37th St., Brooklyn  
N. Y. (5)  
● **GENERAL CABLE CORP.**, 420 Lexington Ave., N. Y.  
17, N. Y. (1, 3, 4, 7, 12, 13, 14)—ADV. PG. 53  
General Electric Co., Apparatus Sales Div., 1 River  
Road, Schenectady 5, N. Y. (14)  
General Electric Co., Construction Materials Div.,  
1285 Boston Ave., Bridgeport 2, Conn. (14)  
General Insulated Wire Works Inc., 69 Gordon  
Ave., Providence 5, R. I. (12)  
Hiltemp Wires, Inc., 26 Windsor Rd., Mineola, L. I.,  
N. Y. (9)  
Kennecott Wire and Cable Co., Phillipsdale (Rum-  
ford 16), R. I. (3)  
Lincoln Electric Co., 22801 St. Clair Ave., Cleveland  
17, Ohio (14)  
Lowell Insulated Wire Div., Overlook Corp., 171  
Lincoln St., Lowell, Mass. (5, 12)  
Miller Electric Co., 120 Main St., Pawtucket, R. I.  
(1, 3)  
National Electric Products Corp., Gateway Center,  
140 Starwik St., Pittsburgh 22, Pa. (4, 7, 12,  
14)  
National-Standard Co., Wayne St., Niles, Mich. (2)  
Nehring Electrical Works, 9th & Locust Sts., Dekalb,  
Ill. (1, 13)  
New England Electrical Works, Inc., 365 Main St.,  
Lisbon, N. H. (11)  
● **OKONITE CO.**, Passaic, N. J. (1, 3, 4, 7, 12,  
13, 14)—ADV. PG. 137  
Page Steel & Wire Div., American Chain & Cable  
Co., Inc., First & River Sts., Monessen, Pa. (2,  
8, 14)  
Phalo Plastics Corp., 25 Foster St., Worcester 8,  
Mass. (5)  
● **PHELPS DODGE COPPER PRODUCTS CORP.**, 40  
Wall St., New York 5, N. Y. (3, 4, 5, 12,  
13, 14)—ADV. PG. 98-99  
Plastic Wire & Cable Corp., E. Main St., Jewett  
City, Conn. (1, 3, 4, 5, 12, 14)  
Plastoid Corp., 42-61 24th St., L. I. C. 1, N. Y.  
(1, 3, 4, 12, 13)  
Reynolds Metals Co., 2500 S. 3rd St., Louisville 1,  
Ky. (13)  
Rhode Island Insulated Wire Co., Inc., 50 Burnham  
Ave., Cranston, R. I. (1, 3, 5, 7, 12)  
● **RODALE MFG. CO., INC.**, 6th & Minor Sts.,  
Emmaus, Pa. (5, 9)—ADV. PG. 143  
Roebing's Sons Corp., John A., 640 S. Broad St.,  
Trenton 2, N. J. (4, 13)  
Rome Cable Corp., Ridge St., Rome, N. Y. (3, 4, 13)  
Royal Electric Co., Inc., 95 Grand Ave., Pawtucket,  
R. I. (1, 5, 12, 13, 14)  
Safety Live Line Tool Co., 973 68th Ave., Oakland  
21, Calif. (7)  
Sequoia Process Corp., 871 Willow St. (P. O. Box  
1007), Redwood City, Calif. (1, 3, 12)  
Southern Electrical Corp., P. O. Box 989, Chatta-  
nooga 5 Tenn. (13)  
Triangle Conduit & Cable Co., Inc., Triangle &  
Jersey Aves., New Brunswick, N. J. (4, 7, 13)  
● **UNITED STATES RUBBER CO. ELECTRICAL WIRE  
AND CABLE DEPT.**, 1230 Avenue of  
the Americas, New York 20, N. Y. (1, 3, 4, 5,  
12, 13, 14)—ADV. PG. 144  
United States Rubber Co., Mechanical Goods Div.,  
1230 Avenue of the Americas, New York 20,  
N. Y. (1, 7, 13)  
● **AMERICAN STEEL & WIRE DIV., UNITED STATES  
STEEL CORP.**, Rockefeller Bldg., Cleveland 13,  
Ohio (1, 2, 3, 4, 8, 12, 13, 14)—ADV. PG.  
93, 94, 95, 96  
U. S. Wire & Cable Corp., Progress & Monroe Sts.,  
Union, N. J. (3, 4, 5, 12)  
Utilities Service Co., 1 Pine St., Allentown, Pa.  
(8, 12)

Walker Brothers, End St., Conshohocken, Pa. (4, 13)  
Western Insulated Wire Co., 2425 E. 30th St.,  
West Los Angeles 58, Calif. (12, 14)  
Whitney Blake Co., 1565 Dixwell Ave., Hamden,  
Conn. (5, 12, 13)  
Youngstown Sheet and Tube Co., Stambaugh Bldg.,  
Youngstown 1, Ohio (14)

### WIRE, Magnet

1. Asbestos Covered
2. Cotton or Silk-Covered
3. Enameled
4. Glass-Insulated
5. Paper-Insulated
6. Plastic-Insulated

American Insulated Wire Corp., 36 Freeman St.,  
Pawtucket, R. I. (1, 2, 4)  
● **AMERICAN STEEL & WIRE DIV., UNITED STATES  
STEEL CORP.**, Rockefeller Bldg., Cleveland 13,  
Ohio (2, 3, 4, 5, 6)—ADV. PG. 93, 94, 95, 96  
Anaconda Wire & Cable Co., 25 Broadway, New  
York 4, N. Y. (1, 2, 3, 4, 5, 6)  
Belden Mfg. Co., 4647 W. Van Buren St., Chicago  
44, Ill. (1, 2, 3, 4, 5, 6)  
Carol Cable Co., 190 Middle St., Pawtucket, R. I.  
(6)  
Chase Brass & Copper Co., Inc., 236 Grand St.,  
Waterbury 20 Conn. (1, 2, 3, 4, 5)  
Columbia Wire & Supply Co., 2850 Irving Park Rd.,  
Chicago 18, Ill. (1, 2, 3, 4, 5, 6)  
Electric Auto-Lite Co., Wire and Cable Div., Port  
Huron, Mich. (2, 3, 4, 5, 6)  
Fidelity Machine Co., Inc., 3908 Frankford Ave.,  
Phila. 24, Pa. (4, 13)  
Gem Electric Mfg. Co., Inc., 237 37th St., Brook-  
lyn, N. Y. (6)  
Hiltemp Wires Inc., 26 Windsor Rd., Mineola, L. I.,  
N. Y. (3, 4, 5)  
● **GENERAL CABLE CORP.**, 420 Lexington Ave., N. Y.  
17, N. Y. (1, 2, 3, 4, 5, 6)—ADV. PG. 58  
General Electric Co., Construction Materials Div.,  
1285 Boston Ave., Bridgeport 2, Conn. (1, 3, 4)  
Hiltemp Wires, Inc., 26 Windsor Ave., Mineola,  
N. Y. (3, 6)  
Insulation and Wires Inc., 3435 Chouteau Ave.,  
St. Louis 3, Mo. (2, 3, 4)  
Kennecott Wire and Cable Co., Phillipsdale (Rum-  
ford 16), R. I. (2, 3, 4, 5, 6)  
New England Electrical Works, Inc., 365 Main St.,  
Lisbon, N. H. (2, 3, 4, 6)  
Phalo Plastics Corp., 25 Foster St., Worcester 8,  
Mass. (6)  
● **PHELPS DODGE COPPER PRODUCTS CORP.**, 40  
Wall St., New York 5, N. Y. (2, 3, 4, 5, 6)  
—ADV. PG. 98-99  
Plastic Wire Cable Corp., E. Main St., Jewett City,  
Conn. (6)  
Radix Wire Co., 26260 Lakeland Blvd., Cleveland  
32, Ohio (1)  
Rockbestos Products Corp., Nicoll and Canner Sts.,  
New Haven 4 Conn. (1)  
Roebing's Sons Corp., John A., 640 S. Broad St.,  
Trenton 2 N. J. (1, 2, 3, 4, 5, 6)  
● **ROME CABLE CO.**, Ridge St., Rome, N. Y. (1,  
2, 4, 5, 6)—ADV. PG. 122-123  
Wheeler Insulated Wire Co., 150 E. Aurora St.,  
Waterbury 20, Conn. (2, 3)

### WIRES, Cabled, Insulated

Accurate Insulated Wire Corp., 25 Fox St., New  
Haven 13, Conn.  
Alpha Wire Corp., 430 Broadway, N. Y. 13, N. Y.  
Alphaduct Wire & Cable Co., Ford Ave. (Box 67),  
Milltown, N. J.  
American Electric Cable Co., 181 Appleton St.,  
Holyoke, Mass.  
American Insulated Wire Corp., 36 Freeman St.,  
Pawtucket, R. I.  
American Phenolic Corp., 1830 S. 54th St., Chi-  
cago 50, Ill.  
● **AMERICAN STEEL & WIRE DIV., UNITED STATES  
STEEL CORP.**, Rockefeller Bldg., Cleveland 13,  
Ohio—ADV. PG. 93, 94, 95, 96  
Anaconda Wire & Cable Co., 25 Broadway, New  
York 4, N. Y.  
Ansonia Wire & Cable Co., 63 Main St., Ansonia,  
Conn.  
Belden Mfg. Co., 4647 W. Van Buren St., Chicago  
44, Ill.  
Berkshire Electric Cable Co., Leeds, Mass.  
Brand & Co., Inc., William, North & Valley Sts.,  
Williamstic, Conn.  
Champion Cable Co., 1805 E. 40 St., Cleveland 3,  
Ohio  
Chester Cable Corp., Oakland Ave., Chester, N. Y.  
Circle F Mfg. Co., 720 Monmouth St., Trenton 4,  
N. J.  
Circle F Mfg. Co., 720 Monmouth St., Trenton 4,  
Maspeth, L. I., N. Y.  
Collier Insulated Wire Co., 249 Roosevelt Ave.,  
Pawtucket, R. I.  
Columbia Cable & Electric Corp., 255 Chestnut St.,  
Brooklyn 8, N. Y.  
Columbia Wire & Supply Co., 2850 Irving Park  
Rd., Chicago 18, Ill.  
Cornish Wire Co., Inc., 50 Church St., N. Y. 7, N. Y.  
Diamond Wire & Cable Co., 445 Park Ave., Syc-  
amore, Ill.  
Fidelity Machine Co., Inc., 3908 Frankford Ave.,  
Phila. 24, Pa.  
● **GENERAL CABLE CORP.**, 420 Lexington Ave., N. Y.  
17, N. Y.—ADV. PG. 58  
General Electric Co., Construction Materials Div.,  
1285 Boston Ave., Bridgeport 2, Conn.  
General Insulated Wire Works, Inc., 69 Gordon Ave.,  
Providence 5, R. I.

Hatfield Wire and Cable Div., Continental Copper & Steel Indus., Inc., 487 Hillside Ave., Hillside 5, N. J.  
 Hitemp Wires, Inc., 26 Windsor Ave., Mineola, L. I., N. Y.  
 Interstate Mfg. Corp., 26 Sterling St., East Orange, N. J.  
 Miller Electric Co., 120 Main St., Pawtucket, R. I.  
 Nehring Electrical Works, 9th & Lucust Sts., Delakb. Ill.  
 ● **OKONITE CO.**, Passaic, N. J.—ADV. PG. 137  
 Phalo Plastics Corp., 25 Foster St., Worcester 8, Mass.  
 ● **PHELPS DODGE COPPER PRODUCTS CORP.**, 40 Wall St., New York 5, N. Y.—ADV. PG. 98-99  
 Plastic Wire & Cable Corp., E. Main St., Jewett City, Conn.  
 Plastoid Corp., 42-61 24th St., L. I. C. 1, N. Y.  
 Radix Wire Co., 26260 Lakeland Blvd., Cleveland 32, Ohio  
 Reynolds Metals Co., 2500 S. 3rd St., Louisville 1, Ky.  
 Rhode Island Insulated Wire Co., Inc., 50 Burnham Ave., Cranston, R. I.  
 Rockbestos Products Corp., Nicolli and Canner Sts., New Haven 4, Conn.  
 Roebing's Sons Corp., John A., 640 S. Broad St., Trenton 2, N. J.  
 ● **ROME CABLE CORP.**, Ridge St., Rome, N. Y.  
 Royal Electric Co., Inc., 95 Grand Ave., Pawtucket, R. I.  
 Sequola Process Corp., 871 Willow St. (P. O. Box 1007), Redwood City, Calif.  
 ● **SIMPLEX WIRE & CABLE CO.**, 79 Sidney St., Cambridge 39, Mass.—ADV. PG. 142  
 Surprenant Mfg. Co., 199 Washington St., Boston 8, Mass.  
 Triangle Conduit & Cable Co., Inc., Triangle & Jersey Aves., New Brunswick, N. J.  
 ● **UNITED STATES RUBBER CO., ELECTRICAL WIRE AND CABLE DEPT.**, 1230 Avenue of the Americas, New York 20, N. Y.—ADV. PG. 144  
 U. S. Wire & Cable Corp., Progress & Monroe Sts., Union, N. J.  
 Walker Brothers, End St., Conshohocken, Pa.  
 Western Insulated Wire Co., 2425 E. 30th St., Los Angeles 58, Calif.  
 Whitney Blake Co., 1565 Dixwell Ave., Hamden, Conn.

#### WIREWAYS

Adam Electric Co., Frank, P. O. Box 357, St. Louis, Mo.  
 Associated Lighting Service, 876 Kaynne St., Redwood City, Calif.  
 Barber Electric Mfg. Co., Inc., 30 Chestnut St., N. Attleboro, Mass.  
 Continental Electric Equipment Co., Box 1055, Cincinnati 1, Ohio  
 Curtis Lighting Inc., 6135 W. 65 St., Chicago 38, Ill.  
 Gustavson, Inc., 8600 Chestnut St., Kansas City 30, Mo.  
 Howard Electric, 1700 N. Kostner Ave., Chicago 39, Ill.  
 Huenefeld Co., Engineered Products Div., 2701 Spring Grove Ave., Cincinnati 25, Ohio  
 Keystone Mfg. Co., 23328 Sherwood Rd., Centerline, Detroit, Mich.  
 Kupfrian Mfg. Corp., 395 State St., Binghamton, N. Y.  
 Meter Devices Co., 1001 Prospect Ave. S. W., Canton 6, Ohio  
 National Electric Products Corp., Gateway Center, 140 Starwix St., Pittsburgh 22, Pa.  
 Parker Electrical Mfg. Co., 221 Washington St., Oakland 7, Calif.  
 Queen Products Co., Inc., Thirteenth & Rowan Sts., Louisville 3, Ky.  
 Robertson Co., H. H., 2400 Farmers Bank Bldg., Pittsburgh 22, Pa.  
 Royal Switchboard Co., Inc., 460 Driggs Ave., Brooklyn 11, N. Y.  
 Sun Electric Products, Inc., 28 S. Day St., Orange, N. J.

#### WRENCHES

1. Adjustable and Ratchet
2. Socket Screw
3. Lineman's
4. Pipe
5. Torque-Limiting

Armstrong Bros. Tool Co., 5200 W. Armstrong Ave., Chicago 30, Ill. (1, 4)  
 Barnard Co., Inc., B. S., 128 Lafayette St., N. Y. 13, N. Y. (1, 3)  
 Bashlin Co., W. M., Bashlin Bldg., Grove City, Pa. (1, 3)  
 Billings & Spencer Co., 1 Laurel St., Hartford 1, Conn. (1)  
 Blackhawk Mfg. Co., 5325 W. Rogers, Milwaukee 46, Wis. (1, 2, 4, 5)  
 Capewell Mfg. Co., 60-70 Governor St., Hartford 2, Conn. (4)  
 Chance Co., A. B., 210 N. Allen St., Centraira, Mo. (3)  
 Crescent Tool Co., 200 Harrison St., Jamestown, N. Y. (1)  
 Duro Metal Products Co., Kildare & Schubert Sts., Chicago, Ill. (1, 2, 5)  
 Erie Tool Works, 12th & Liberty Sts., Erie, Pa. (4)  
 General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill. (2)

Hunter Tools, 6608 S. Gretna Ave., Whittier, Calif. (2)  
 Klein & Sons, Mathias, 7200 McCormick Rd., Chicago 14, Ill. (3)  
 Kraeuter & Co., Inc., 585 18th Ave., Newark 3, N. J. (1)  
 Lowell Wrench Co., 54 Commercial St., Worcester 8, Mass. (1, 4)  
 Miller Equipment Co., Inc., 13th & New Streets, Franklin, Pa. (3)  
 Nye Tool Co., 4120-30 Fullerton Ave., Chicago 32, Ill. (1, 4)  
 Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa. (3)  
 Owatonna Tool Co., Owatonna, Minn. (1, 2, 4, 5)  
 Oxwall Tool Co., Ltd., 928 Broadway, New York 10, N. Y. (1, 4)  
 P & C Hand Forged Tool Co., Box 5926, Milwaukee P. O., Portland 22, Ore. (1, 3, 4, 5)  
 Petersen Mfg. Co., Inc., De Witt, Neb. (1, 4)  
 Quality Tools Corp., New Wilmington, Pa. (2)  
 Ridge Tool Co., 400 Clark St., Elyria, Ohio (4)  
 Roddick Tool Co., 1023 N. Pauline (P. O. Box 109), Anaheim, Calif. (4)  
 Safety Live Line Tool Co., 973 86th Ave., Oakland 21, Calif. (3, 5)  
 Snap-On Tools Corp., 8028-28th Ave., Kenosha, Wis. (1, 2, 3, 4, 5)  
 Stevens Walden Inc., 400 Shrewsbury St., Worcester, Mass. (1, 2, 3, 5)  
 Tec Imports, 14525 Bessemer St., Van Nuys, Calif. (1, 3, 4)  
 Toledo Pipe Threading Machine Co., 1445 Summit St., Toledo 4, Ohio (4)  
 Utica Drop Forge & Tool Corp., Utica 4, N. Y. (1)  
 Vaco Products Co., 317 E. Ontario St., Chicago 11, Ill. (2)  
 Vanadium Tool Co., Box 322, Athens, Ohio (3)  
 Western Automatic Machine Screw Co., P. O. Box 280, Elyria, Ohio (2)  
 Xcelite Inc., Thorne Ave. at Bank St., Orchard Park, N. Y. (1)

#### X

##### X-RAY, Industrial

Brown Boveri Corp., 19 Rector St., N. Y. 6, N. Y.  
 Campbell X. Ray Corp., 110 Cummington St., Boston 15, Mass.  
 General Electric Co., X-Ray Dept., 4855 Electric Ave., Milwaukee 1, Wis.  
 Marvin Mfg. Co., 648 Santa Fe Ave., Los Angeles 21, Calif.  
 Sensitive Research Instrument Corp., 9 Elm Ave., Mount Vernon, N. Y.  
 Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.

#### Y

##### YARNS

1. Asbestos
2. Cotton or Silk
3. Fibrous Glass

Glass Fibers Inc., 1810 Madison Ave., Toledo 2, Ohio (3)  
 Keasbey & Mattison Co., Butler Ave., Ambler, Pa. (1)  
 L. O. F. Glass Fibers, Inc., 1810 Madison Ave., Toledo 1, Ohio (3)  
 Rusgreen Mfg. Co., 14262 Birwood Ave., Detroit 38, Mich. (2)  
 Union Asbestos & Rubber Co., 332 S. Michigan Ave., Chicago 4, Ill. (1)  
 United States Rubber Co., Mechanical Goods Div., 1230 Avenue of the Americas, New York 20, N. Y. (1, 2)

##### YOKES, Strain Insulator

Brewer-Titchener Corp., 111 Port Watson St., Cortland, N. Y.  
 Knox Porcelain Corp., 2706 Mynders Ave. (P. O. Box 2031), Knoxville 1, Tenn.  
 Lapp Insulator Co., Inc., 35 Gilbert St., Leroy, N. Y.  
 Line Material Co., 700 West Michigan St., Milwaukee, Wis.  
 Ohio Brass Co., 390 N. Main St., Mansfield, Ohio  
 Oliver Iron & Steel Corp., 1014 Oliver Building, Pittsburgh 22, Pa.  
 Sierra Electric Corp., 15100 S. Figueroa, Gardena, Calif.  
 Victor Insulators Div., I-T-E Circuit Breaker Co., Victor, N. Y.

#### Z

##### ZINC, Sheet and Rod

American Nickeloid Co., Peru, Ill.  
 National Lead Co., 111 Broadway, N. Y. 6, N. Y.  
 New Jersey Zinc Sales Co., Inc., 160 Front St., N. Y. 38, N. Y.

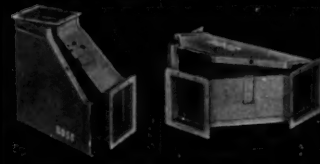
##### ZINCS, Battery

Belmont Smelting & Refining Works, Inc., 330 Belmont Ave., Brooklyn 7, N. Y.  
 Bryant Mfg. Co., 410 N. Paulina St., Chicago 22, Ill.  
 New Jersey Zinc Sales Co., Inc., 160 Front St., N. Y. 38, N. Y.

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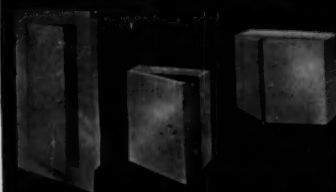
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